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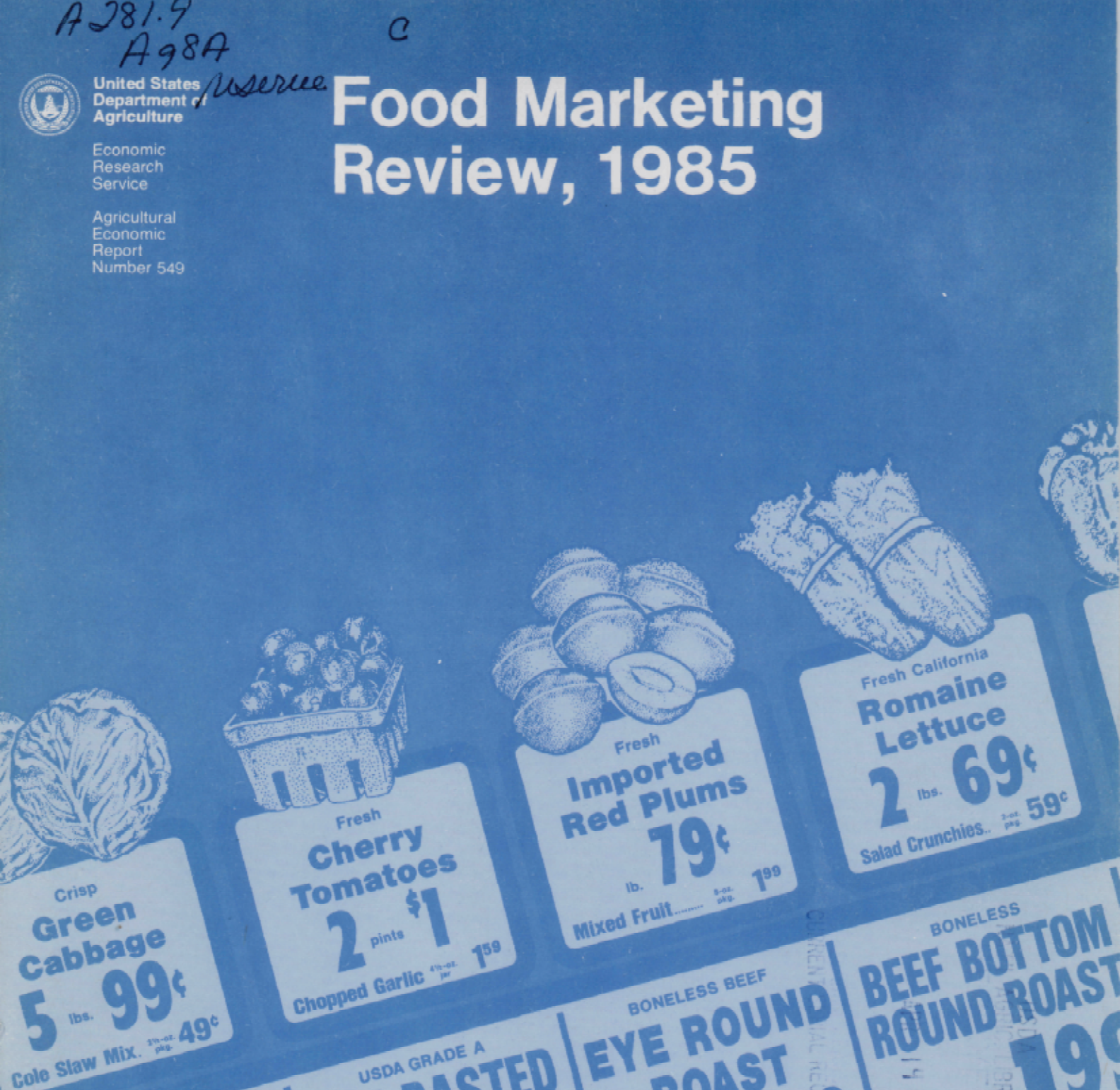
Food Marketing Review, 1985



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ABSTRACT

Sales in the U.S. food marketing system reached an estimated half a trillion dollars in 1985, a 3.5-percent real increase above 1984, compared with the 2.3-percent real increase in gross national product. The food marketing system comprised over 1 million firms in 1985 in food manufacturing, wholesaling, retailing, and service. Only food service shows a long-term increase in total number of firms. Because the food marketing system benefits from a low-inflation economy which allows costs to be held down, 1985 was a stable year as farm prices fell and wages and marketing costs increased moderately. This report analyzes these and other developments, structural changes, and the outlook for the U.S. food marketing system.

Keywords: Food service, retailing, manufacturing, wholesaling, marketing

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PREFACE

The U.S. food marketing system, an aggregate of over a million firms that processes, transports, wholesales, and retails the Nation's food, performs a critically important function in marketing our agricultural output from the farm gate to the final consumer. This publication explains the scope and characteristics as well as recent developments and outlook for the food marketing system.

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CONTENTS

GLOSSARY

Aggregate concentration--The share of output in a sector (say, food manufacturing) that is produced by the largest firms.

Chain--A food retailer or foodservice operator owning 11 or more stores or outlets.

Disposable personal income (DPI)--Income that individuals retain after they have deducted taxes.

Divestiture--The sale of a unit (a factory, a division, or a subsidiary) of a firm, either to another firm, to management of the unit, or to independent investors.

E.A.S.--Electronic Article Surveillance system, consisting of hidden labels on products which if removed from the premises without passing through a checkout stand will activate an alarm.

Food manufacturing--Activities that typically use power driven machines and materials-handling equipment to mechanically or chemically transform raw materials into foods and beverages for human consumption. Certain related industrial products, such as feeds, and vegetable and animal fats and oils, are also produced here.

Food service--The dispensing of prepared meals and snacks intended for onpremise or immediate consumption, except for the following products when other foods are not available: candies, popcorn, pretzels, nuts, and drinks. Vended foods qualify as food service only when tables or counters are available in the immediate area and a person with records of food receipts is present at the establishment.

Commercial establishments--Public establishments (free-standing or included in/as part of a host establishment) with the objective of the preparation/serving and sale of meals and snacks for profit to the general public.

Drinking places--Establishments with food service that do not operate as subordinate facilities of different and separately identifiable kinds of businesses and whose primary function is the sale of alcoholic beverages sold for consumption on the premises. Includes bars, beer gardens, taverns, night clubs, saloons, etc.

Eating places--Establishments that do not operate as subordinate facilities of different and separately identifiable kinds of businesses, and whose primary function is the sale of prepared meals and snacks for onpremise or immediate consumption. Includes restaurants/lunchrooms, fast food outlets, and cafeterias.

Lodging places--Establishments that provide both lodging and food service to the general public. Included are hotels, motels, and tourist courts. Excluded are rooming and boarding houses and private residences.

Recreation/entertainment--Foodservice operations in theaters; bowling, billiard, or pool halls; commercial sports establishments (racetracks and stadiums); membership golf or country clubs; public golf courses;

and miscellaneous commercial amusement and recreational establishments (tennis clubs, camps, athletic clubs, and amusement parks).

Retail hosts--Foodservice operations that operate in conjunction with/as part of retail establishments such as department stores, limited-price variety stores, drug stores, and miscellaneous retailers.

Noncommercial establishments--Establishments where meals and snacks are prepared/served as an adjunct, supportive service to the primary purpose of the establishment. Includes schools, colleges, hospitals and extended care facilities, vending, plants and offices, correctional facilities, military feeding, transportation (trains, cruise ships, and airplanes).

Foodstore--A retail outlet with at least 50 percent of sales in food products intended for off-premise consumption.

Grocery store--A foodstore which sells a variety of food products including fresh meat, produce, packaged and canned foods, frozen foods, other processed foods, and nonfood products.

Supermarket--A grocery store, primarily self-service in operation, providing a full range of departments, and having at least $1.0 million in annual sales in 1972 dollars.

Combination food and drug store--A supermarket containing a pharmacy, a nonprescription drug department, and a greater variety of health and beauty aids than that carried by conventional supermarkets.

Superstore--A supermarket distinguished by its greater variety of products than conventional supermarkets, including specialty and service departments, and considerable nonfood (general merchandise) products.

Warehouse store--A supermarket with limited product variety and fewer services provided, incorporating case lot stocking and shelving practices. Superwarehouse stores are larger and offer expanded product variety and often service meat, deli or seafood departments.

Convenience store--A small grocery store selling a limited variety of food and nonfood products, typically open extended hours.

Superette--A grocery store, primarily self-service in operation, selling a wide variety of food and nonfood products with annual sales below $1.0 million in 1972 dollars.

Foreign investment--Ownership of domestic assets by foreign persons or firms.

Gross margin--Retailer markup (over cost) as a percentage of total sales.

Gross national product (GNP)--Dollar value of all goods and services sold plus the estimated value of imported outputs during a given period.

Independent--A food retailer or foodservice operator owning 10 or fewer stores or outlets.

Merger--The combination of two or more firms into one.

Productivity growth--Measures of the rate of growth of output, relative to the growth of inputs (labor, capital and materials) used to produce that output.

Wholesalers--Operators of firms engaged in the purchase, assembly, transportation, storage, and distribution of groceries and grocery products, serving retailers, institutions, business, industrial, and commercial users.

- Agents and brokers--Wholesale operators who buy or sell on the account of others for a commission and usually do not store or physically handle products.

- Manufacturers' sales branches and offices--Wholesale operations maintained by grocery manufacturers (apart from their plants) for distribution purposes.

- Merchant wholesalers--Operators of firms primarily engaged in buying and selling groceries and grocery products on their own account.

  - General line wholesale merchants--Merchants handling a broad line of dry groceries, health and beauty aids, and household products.

  - Limited line wholesale merchants--Merchants who handle a narrow range of dry groceries dominated by canned foods, coffee, spices, bread, and soft drinks.

  - Specialty wholesale merchants--Merchants who handle perishables such as frozen foods, dairy products, poultry, meat, fish, fruits, and vegetables.

SUMMARY

Sales in the U.S. food marketing system reached an estimated half a trillion dollars in 1985, a 3.5-percent real increase in sales above 1984, compared with the 2.5-percent real increase in gross national product (GNP). The food marketing system comprised over 1 million firms in 1985 in food manufacturing, wholesaling, retailing, and service. Food service is the only industry in the system showing a long-term increase in total number of firms. Given current trends, employment in retailing, wholesaling, and processing will likely decline as attempts are made to hold costs down. This report analyzes these and other developments, structural changes, and the outlook for the U.S. food marketing system.

Specific findings of this report:

o Food industry acquisitions and mergers increased during the 1980's, with transactions averaging 607 per year, compared with 474 annually during 1975-79. Over 40 mergers took place in food retailing in 1983-84, and over 90 in the foodservice industry.

o Because the food marketing system benefits from a low-inflation economy which allows costs to be held down, 1985 was a stable year as farm prices fell and wages and marketing costs increased moderately.

o The share of the consumer's take-home pay allocated to food fell from nearly 17 percent in 1975 to about 15 percent in 1985. Most of this share loss was absorbed by the Nation's grocery retailers.

o The share of the food dollar allocated to food prepared and eaten at home fell from 73 percent in 1960 to 58 percent in 1984.

o The bulk of all retail food sales continues to be through conventional supermarkets. But warehouse stores, super stores, combination food and drug stores, and convenience stores have all increased their shares (see fig. 1).

o Highly processed foods accounted for an increasing share and processed fruits and vegetables, milk, and sugar for a declining share of total food shipments in 1985.

o Franchised outlets, chains, and fast food outlets continued to gain at the expense of single-unit and full-service eating places in 1985.

Outlook for the food marketing system through the balance of the decade is stable. The report finds that:

o Moderate growth in disposable personal income (DPI) will most affect foodservice growth.

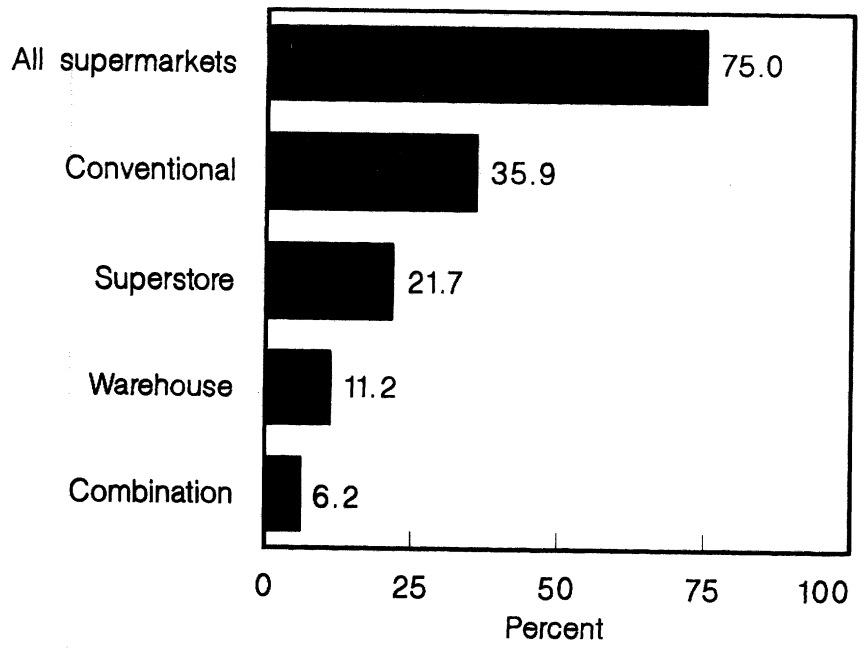
o The market for food away from home will continue growing through the 1980's, but at a slower pace.

o Inflation-adjusted growth in the food retailing industry (which is less dependent on changes in DPI) should mirror the rate of population growth.

o Continued experimentation with new retail and foodservice formats and new product introduction appears likely.

Figure 1

Supermarkets: Sales as a proportion of grocery store sales, 1982



Source: (3)

Food Marketing Review, 1985

INTRODUCTION

Americans allocated about 15 percent of their disposable personal income to food in 1985, the lowest percentage in U.S. history. About 5 percent went to purchase the raw agricultural products used in the food supply and the other 10 percent, over $300 billion, to pay for the processing, transporting, storing, distributing, retailing, and servicing of the raw food supply. This intricate and interacting network of firms that market the food supply from the farm gate to the consumer makes up the food marketing system.

This report begins an annual series analyzing and assessing recent developments in the U.S. food marketing system, encompassing all firms marketing the U.S. food supply: food processors, wholesalers, retailers, and foodservice operators.

Much of the yearly and other periodic data used in this report are taken from U.S. Government agencies, including the Census Bureau, Bureau of Labor Statistics (BLS), Bureau of Economic Analysis (BEA), Securities and Exchange Commission (SEC), and the Internal Revenue Service (IRS). Other data are derived from consulting firms, trade associations, academic research, and trade publications.

Since availability of information differed, various sections of this report treat industry scope, analyses of market levels, and emphasis of relevant variables differently. Much of the analysis is based on 1982 Census data, the most recent year available. These data represent the most complete information for measuring the structural characteristics of the food marketing industries. Most chapters on individual industries contain later data from other secondary sources, including trade journals and statistics by Government regulatory agencies. Where possible, we make annual estimates when data are available only every 5 years from Census.

BACKGROUND

The performance of the four market sectors (processing, wholesaling, retailing, and servicing) is important to the overall functioning of the U.S. farm, consumer, and nonfarm economies. About 1,400 pounds of food per person (retail-weight equivalent) left American farms in 1985, virtually unchanged over the past quarter century. Over the years, however, the composition and final form of foods consumed have changed tremendously:

- Less milk and eggs and more chicken, fish, fats and oils, soft drinks, and vegetables per person are consumed now than 10 years ago.

- o Relatively less food is now consumed at home and more away from home. At-home food expenditures declined from roughly 73 percent of total food expenditures in 1960 to an estimated 58 percent in 1985.

- o The degree of processing has changed considerably for many food products sold in grocery stores, evident from shifts in what is purchased (breaded chicken fillets rather than raw chicken, for example). At the retail level, the number of products in the Nation's supermarkets ranges from 12,000-25,000.

- o Consumers make the bulk of their at-home purchases in large supermarket chains; three decades ago, single store firms predominated. Fast food chains account for about 45 percent of eating place sales, up from 10 percent in the 1950's.

The food marketing system is the link between the farmer and the consumer. Shifts in consumer demand for agricultural products are transmitted by the food marketing system to the farmer. Consumer demand can be affected by changes in the sociodemographic composition of the population (including shifts in regionalization, age, race, income, educational levels, and family characteristics) and by changes in technology, lifestyles, and health concerns. The food marketing system in turn can stimulate demand for agricultural products via product innovation, advertising and promotion, and efficient distribution.

The food marketing system handles an unpredictable and highly perishable supply of raw material. Crop output cannot be closely controlled because of the uncertainty of weather. Long fixed lags may sometimes occur between the decision to produce and actual production. These uncertainties mean that the food marketing system must deal with wide price fluctuations for some commodities, especially fresh fruits and vegetables and animal products.

The food marketing system's performance is determined by its ability to market a safe, continuous, and adequate food supply in forms that respond to consumer preferences at market prices which do not distort prevailing supply and demand conditions. Within the system, performance is determined by individual and collective actions of numerous food marketing firms. Over a million establishments within the overall food marketing system include over 250,000 retailers, about 700,000 foodservice establishments, about 40,000 wholesalers, and 16,000 food processors. The food marketing industry--processing, wholesaling, and retailing--like most other major industries, however, has had a sharp drop in the number of firms in recent years. The 100 largest food, alcohol, and tobacco processing companies accounted for over half of the U.S. shipments of all food processing establishments in 1982. Another 100 companies accounted for an additional 11 percent. The number of food wholesaler establishments dropped by nearly half between 1950 and 1982, while in many SMSA's, large supermarket chains controlled a major market share. The foodservice industry, which has traditionally been highly competitive, has recently seen a rapid proliferation of fast food chains.

The system is one of the largest in the Nation in terms of employment, generating approximately 12 million full-time equivalent jobs and employing more than 1 of every 10 U.S. workers (table 1). These include over 3-1/2 million workers in retailing, wholesaling, and transportation, over 1-1/2 million in food processing, and 3-1/2 million in eating and drinking places.

The food marketing system generates another 3-1/2 million jobs through other supporting sectors such as packaging, advertising, and energy.

Establishments selling groceries, packaged alcohol, and retail food service rank first in sales among all retailers, while food wholesalers rank second in sales among all wholesalers. In 1982, food processing ranked first in sales among all manufacturing industries. The total value added by all food marketing establishments to the gross national product (GNP) in 1984 was $386 billion, or about 10-1/2 percent of GNP (table 1).

The fact that the U.S. food marketing system is essentially a low-growth industry compared to the nonfood economy can be seen from both value added and employment relative to other industries and consumer food spending. On the production side, the value added by the food marketing system rose at a yearly compound growth rate of 1 percent between 1976 and 1984, while the nonfood marketing sector rose 1.6 percent. Consequently, the food system's share of total value added fell from about 11.5 percent to about 10.5 percent. Employment generated by the food sector fell from 11.6 to 10.6 percent. Food expenditures rose 3 percent annually while Disposable Personal Income (DPI) rose 5 percent per year. Consequently, the portion of disposable income allocated to food fell from nearly 17 percent to about 15 percent during the decade.

This pattern was slightly altered in 1985. DPI averaged about 5 percent above 1984, while personal consumption expenditures for food were about 5-1/2 percent higher. However, the portion of DPI spent on food remained about the same.

Although the demand side of the food system has grown slowly, the supply side is shaped by several basic economic characteristics. The industry is labor intensive, rather than capital intensive, especially in food service and food retailing. Second, the cost of raw products amounts to about one-third of retail expenditures for domestically produced foods, so that variations in farm prices can affect retail prices. Third, about one-sixth of the U.S. food supply is imported. A large portion of U.S. raw agricultural products is exported, but only a small portion of U.S. manufactured food products.

Given its stable but moderate growth and inherent supply characteristics, the food marketing system benefits from an overall economic climate of stable growth and wage and price stability. The 1980's climate is substantially different from the 1970's. Stable or falling farm prices have been the rule. Between 1980 and 1985, the index of prices received by farmers for food commodities rose only 5 percent, compared with nearly 40 percent between 1975 and 1980. Wages currently account for another third of food marketing system costs. Rapidly rising wages prevailed during most of 1970-82; average hourly earnings rose from $3.35 to $8.49 during that period. Since 1982, increases in wage rates have slowed markedly, and food marketing firms have negotiated wage concessions in many instances.

Nonfarm inputs other than labor are of lesser but significant importance to the industry's costs. Energy and intercity transportation costs account for about one-tenth of the industry's costs. Oil prices rose over 600 percent between 1972 and 1982, but fell almost one-fourth between the early and mid-1980's. Real interest rates, however, rose considerably during the early 1980's. The nominal prime rate of interest reached nearly 16 percent in 1982, while inflation was only 6 percent. In contrast, the inflation

Table 1--Value added and employment generated by the U.S. food marketing system

Item	1976	1978	1980	1982	1984	1976	1978	1980	1982	1984
	Billion dollars					Percent				
Value added:										
Food sector	198.2	233.0	298.1	336.8	386.0	11.5	10.8	11.0	11.0	10.5
Processing	40.7	46.7	56.2	65.9	76.8	2.3	2.2	2.1	2.2	2.1
Retailing and wholesaling	51.9	60.4	75.5	85.7	94.6	3.0	2.8	2.9	2.8	2.6
Transportation	8.6	10.3	13.5	17.1	20.3	.5	.5	.5	.6	.5
Eating and drinking places	27.7	33.5	39.8	44.7	51.2	1.6	1.5	1.5	1.5	1.4
Other supporting sectors	69.3	82.1	103.8	123.4	143.1	4.0	3.8	3.9	4.0	3.9
Nonfood sector	1,519.6	1928.9	2,345.3	2,727.1	3,377.3	88.5	89.2	89.0	90.9	89.5
Gross national product	1,717.8	2,161.9	2,634.4	3,063.9	3,663.3	100.0	100.0	100.0	100.0	100.0
	Millions									
Full-time equivalent employment:										
Food sector	12.2	11.5	12.2	12.0	12.0	11.6	11.2	11.4	10.9	10.6
Processing	1.5	1.5	1.6	1.6	1.4	1.6	1.5	1.5	1.4	1.2
Retailing and wholesaling	2.9	3.0	3.2	3.2	3.2	3.0	2.9	3.0	2.9	2.8
Transportation	.4	.4	.4	.4	.4	0.4	0.4	0.4	0.4	0.4
Eating and drinking places	3.0	3.1	3.3	3.2	3.4	3.1	3.0	3.1	2.9	3.0
Other supporting sectors	3.4	3.5	3.7	3.6	3.6	3.5	3.4	3.5	3.3	3.2
Nonfood sector	85.0	90.8	94.7	98.2	101.5	88.4	88.8	88.6	88.1	89.4
Civilian labor force	96.2	102.3	106.9	110.2	113.5	100.0	100.0	100.0	100.0	100.0

Source: (2). Underscored numbers in parentheses refer to items in the References.

rate was higher than the interest rate during much of the 1970's. Because much of the food marketing industry is not highly leveraged, however, the impact of higher rates has been minimal. Interest accounted for 2 percent of the marketing bill in 1984.

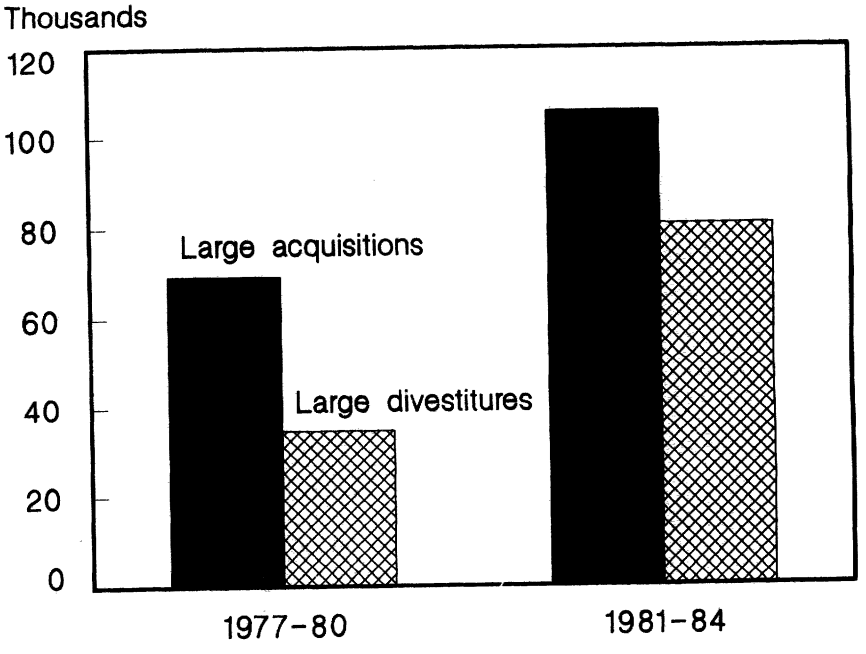
The U.S. dollar has been very strong against all other currencies throughout the 1980's. Gold prices reached nearly $900 an ounce during the late 1970's; by the mid-1980's, they had fallen to $350 an ounce. The value of the dollar compared with nearly all currencies rose very sharply. The decline in exchange rates has benefited importers of foreign agricultural products but has made foreign investment in U.S. food processing, wholesaling, retailing, and food service unattractive.

While producer prices and wages remained relatively stable during the 1980's, so did food prices. Retail food prices rose at an average annual compound rate of 3 percent between 1980 and 1985, compared with 8 percent during the seventies. Thus, wage and price stability on the cost side has been translated into slow price increases at the retail level.

The number of mergers and acquisitions throughout American industry has increased sharply during the 1980's. Food manufacturing, retailing, wholesaling, and food service have all been affected (fig. 2). Many food marketing firms are a prime target for acquisition because of stable growth and strong financial position.

Although much the same environment prevailed in 1985, several differences existed. Farm prices declined 10 percent in 1985. Crop prices dropped 13 percent, while livestock prices averaged 7 percent lower. Second, the

Figure 2
Employed persons involved in mergers and divestitures in food manufacturing



Source: (1)

dollar weakened relative to other foreign currencies, thus raising prices of imported food products. The weakened dollar reflected not only continued trade deficits, but a sharp drop in U.S. interest rates, thus decreasing the demand for U.S. dollars. Interest rates during most of 1985 were considerably below a year earlier, mirroring not only a slowdown in the economy but an accommodating Federal Reserve policy as well.

Economic growth slowed considerably during 1985. Real GNP growth grew only one-third as fast as a year earlier. Real per capita disposable income, which rose nearly 6 percent in 1984, averaged only 1-1/2 percent higher in 1985. Aided by the slowdown in the economy, wages and prices during 1985 rose even slower than in 1984. The producer price index averaged a 2-percent increase in 1984, while it averaged a little over 1 percent higher in 1985.

In 1984, retail food prices advanced less than 4 percent, and the increase in 1985 was 2.3 percent reflecting both a drop in farm prices and modest increases for nonfarm inputs.

Future economic growth will affect the food marketing system in several ways. U.S. Government forecasts call for moderate economic growth and continued wage and price stability for the rest of the decade. Restrained wage and price inflation would be favorable to food marketing. Moderate growth in DPI would most affect food service. The food retailing industry is likely to experience inflation-adjusted growth that closely matches the rate of population growth.

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FOOD MANUFACTURING

Mergers are the most important recent development in the food manufacturing industry, attracting widespread attention during 1984-85, and spurring a continuing transformation of this industry. Between January 1976 and December 1984, 106 of the firms on the 1976 list of the 500 largest food manufacturers had been acquired in mergers. Merger waves are common in the U.S. economy; the largest one to date peaked in 1968 and then declined in the early seventies, while the current one began in 1978 (table 2).

Three features distinguish the current merger wave in food manufacturing. First, many individual transactions are "blockbuster" mergers with some of the largest firms being acquired. Second, many recent large mergers joined together firms that produce related consumer food products, in contrast to the conglomerate character of many mergers during the late sixties. Third, firms now often divest divisions acquired in previous mergers.

Table 2--Selected mergers, U.S. economy and food manufacturing

Item	Constant (1972) dollars paid	Acquisitions	Divestitures
	Million dollars	----- Number ----	
U.S. economy:			
1968	52,834	NA	NA
1970	17,950	NA	NA
1975	9,378	NA	NA
1978	22,723	1229	820
1979	26,640	1297	752
1980	24,855	1161	666
1981	42,338	1498	830
1982	25,983	1402	875
1983	33,892	1506	932
1984	55,912	1562	900
	Large acquisitions		Large divestitures
	Number		
Food manufacturing:			
1977-80	64		25
Employees involved	69,412		34,810
1981-84	42		33
Employees involved	105,659		80,588

NA = Not available.

Sources: U.S. Economy: Data drawn from (2). Nominal value of consideration paid (figure 4, p. 14, (2) deflated by GNP deflator for gross private domestic fixed investment to arrive at constant dollar value. Food manufacturing: Recorded acquisitions and divestitures among 500 largest food manufacturers of 1976; data from SBA USEEM file (9).

Expansion

The recent merger wave occurred as total food manufacturing output grew steadily. Real production, after adjustment for inflation, grew 4.7 percent in 1984; over the last 10 years, real production grew at an average annual rate of 2.8 percent, equal to the average of all manufacturing industries (table 3). Food production growth, however, tends to be much more stable than for most industries; food manufacturing production dipped only slightly during the 1981-82 recession, while industrial production in the economy fell dramatically (by 10 percent, from its prerecession peak to the low point of the recession), before undergoing a strong recovery in 1983 and 1984 (table 3).

Consumers tend to maintain steady levels of expenditures on food for home consumption during recessions; consequently, profits, employment, and

Table 3--Annual changes in prices and industrial production, all manufacturing and food

Year	Annual changes			
	Prices		Industrial production	
	All industrial commodities	Processed foods and feeds	Manufacturing	Food
	Percent			
1972	3.3	5.5	9.9	3.5
1973	6.8	22.6	9.2	3.5
1974	22.2	15.3	-.3	2.6
1975	11.5	6.8	-10.1	-.5
1976	6.4	-2.5	12.0	7.7
1977	7.0	4.6	6.2	4.4
1978	7.3	8.9	6.1	2.8
1979	12.9	9.8	4.6	3.4
1980	16.2	8.4	-4.5	1.4
1981	10.7	3.1	2.5	1.7
1982	2.7	1.1	-8.5	-.7
1983	1.1	1.7	7.7	3.5
1984	2.2	3.7	12.4	4.7

Sources: Price data from (8). Industrial Production Indices from (1).

capital expenditures in food manufacturing tend to be more stable than those in other industries, falling less during recessions and rising less during expansions (table 4).

Of course, steady average growth in food manufacturing as a whole obscures wide variations in growth rates across specific food products and industries. Production of some items, like butter, fluid milk, canned fruits and vegetables, and sugar, have held steady or declined in recent years, with a consequent large number of plant closings. Other industries, such as cheese, poultry processing, chips, and a variety of frozen specialty products, grew rapidly. Growing industries usually attract many new entrants because of their profit potential; at the same time, existing firms and new entrants contribute to that growth by introducing a wide variety of new products.

Demographic shifts in the economy seem to spur high growth in several food industries. Demand for food products that are easy to prepare in small portions has increased along with increases in female labor force participation, size of the elderly population, and declines in average household size and birth and marriage rates. Such products often require additional processing by the food manufacturer, as well as considerable

Table 4--Employment, capital expenditures, and profits in food manufacturing

Year	Employment	Capital expenditures		After-tax profit rate	
		Current dollars	Constant (1972) dollars	Food	All manufacturers
	Thousands	--Billion dollars--		------Percent------	
1972	1,745	3.27	3.27	11.18	10.64
1973	1,715	3.62	3.47	12.78	12.83
1974	1,707	4.03	3.48	14.39	14.90
1975	1,658	4.02	3.06	14.87	11.58
1976	1,689	4.80	3.47	15.18	13.95
1977	1,711	5.12	3.50	13.87	14.18
1978	1,724	5.97	3.80	14.75	15.00
1979	1,733	6.62	3.82	17.05	16.45
1980	1,708	7.39	3.92	14.65	13.88
1981	1,671	8.22	4.05	13.71	13.66
1982	1,636	7.74	3.71	13.06	9.25
1983	1,622	7.78	3.78	12.23	10.53
1984	1,648	1/ 8.80	1/ 4.20	1/ 12.55	1/ 12.45

1/ Preliminary.

Sources: Employment data are annual averages from (5); Capital Expenditures are from Bureau of Economic Analysis series on new plant and equipment expenditures, as reported in (4); profit data are net (aftertax) profits as percentage of equity, from (6). (Reports for 1981 and earlier were published by the Federal Trade Commission.)

investment during development. The emphasis on convenience may also lead to increases in the share of food expenditures devoted to the away-from-home market. For manufacturers, this shift requires increasing attention to sales to foodservice firms rather than to grocery retailers. Manufacturers, especially in poultry processing and frozen specialty items, developed a wide variety of new and altered products to appeal to this market; furthermore, many manufacturers diversified into the foodservice industry themselves.

Productivity

Although food manufacturing employment declined, steady increases in real production occurred during some periods as a result of steady increases in labor productivity (tables 4 and 5). First, after unusually high growth between 1948 and 1966, labor productivity across the economy grew somewhat more slowly until 1973, when it almost stopped. It is still too early to tell if pre-1973 productivity growth has yet returned. Second, productivity growth rates in manufacturing have exceeded those in the rest of the economy. Third, except for the near cessation in 1973-79, measured productivity has grown more rapidly in food manufacturing than in the rest of manufacturing. That 1973-79 collapse in food manufacturing productivity growth was probably

due to the large increase in agricultural commodity prices of 1973 and 1974, which raised processed food prices sharply while reducing demand (table 3). As a result of that demand decline, productivity then fell temporarily, as the strong growth in labor productivity in 1979-81 shows (table 5). The low 1973-79 average in food manufacturing probably combines

Table 5--Productivity growth rates in food manufacturing and the economy

Item	1948-79	1948-66	1966-73	1973-79	1979-81
			Percent		
Total factor productivity:1/					
Private economy	2.0	2.6	1.7	0.4	-0.4
Manufacturing	2.2	2.5	2.4	.8	-.4
Food manufacturing	2.7	3.0	4.1	0	4.5
Farming	3.5	3.9	3.5	2.2	3.7
Nonmanufacturing, Nonfarming	1.3	1.9	1.0	.1	-.5
Labor productivity:2/					
Private economy	2.5	3.1	2.3	.3	NA
Manufacturing	2.7	2.9	3.1	1.5	NA
Food manufacturing	3.1	3.3	4.6	.7	NA
Farming	4.9	5.2	5.2	3.6	NA
Nonmanufacturing, Nonfarming	1.8	2.4	1.6	.2	NA

NA = Not available.

1/ Total factor productivity growth measures the growth rate of output relative to that of all inputs.

2/ Labor productivity growth measures the growth of output relative to the growth of labor inputs.

Source: (3).

declines in productivity in 1973-75 with recovering growth in the later years.

Food manufacturing's overall record may seem somewhat surprising because it had no dramatic technological breakthroughs. Productivity growth has come through a steady accretion of modest innovations, increases in capital per worker, and added employee skills. Food manufacturing has been relatively immune to the main sources of the decline in overall U.S. productivity growth. Many analysts cite the large oil price increases in the 1970's, for example, as a cause of declining productivity growth, since all industrialized countries have experienced declines in productivity growth since 1973, the year of the initial large OPEC price increases. Because food manufacturing uses only modest amounts of energy, OPEC's impact was smaller than it was on other industries, such as chemicals or metal manufacturing.

The tremendous growth of the U.S. labor force during the 1970's also reduced productivity growth by reducing the growth rate of capital per worker and by reducing the average level of skills, since most new workers were young and/or unskilled. Since most of these new workers were funneled into

service industries, however, worker characteristics in manufacturing, particularly in food manufacturing, changed little compared with those in the overall labor force. The stability of food manufacturing production also contributes to steady productivity growth. With steady growth in demand and predictable cash flows, managers can better plan investment programs, and are more likely to commit funds to those programs.

Finally, large food manufacturers have stable, large cash flows, and tax laws provide a strong incentive to reinvest those funds rather than pay them out as dividends. Because food manufacturers have not shown much interest in other manufacturing industries, these large cash flows are available for reinvestment as capital expenditures in food manufacturing. Fixed investment per employee continues to grow steadily in the industry as a result.

Concentration

Persistent structural shifts continue in food manufacturing. The number of food manufacturing firms continues to decline, from over 40,000 in 1947 to 20,616 in 1977, and to an estimated 16,600 in 1982 (table 6). The declining

Table 6--Number of food manufacturing firms and share of value added

Item	1967	1972	1977	1982 1/
		Number		
Establishments	32,517	28,193	26,656	21,316
Companies	26,549	22,171	20,616	16,600
Share of value added, firms:		Percent		
1-50 largest	35	38	40	43
51-100 largest	13	13	12	13
101-200 largest	9	10	11	11
201-500 largest	10	11	11	10
All others	33	28	26	23

1/ 1982 data for companies and value added shares are estimated values. The projected number of companies in 1982 is based on the relationship between the number of plants and the number of companies in preceding years. The projected 1982 shares of value added are based on the 1976-82 changes in employment shares, and assumes that changes in value added shares are proportional to changes in employment shares.

Sources: Plant and company numbers are drawn from (5) for the relevant years. Value added shares for 1967-77 are drawn from a special tabulation of the relevant Censuses, performed by the Census Bureau for the U.S. Department of Agriculture. The 1982 value added projections are based on employment data from (9).

number of companies in food manufacturing runs counter to the trend for all of manufacturing, which increased persistently over the last 20 years. Much of the decline occurred among small firms in local industries, as improvements in transportation opened those industries up to national or regional markets and allowed for the construction of larger, more efficient plants. As firm numbers declined, the share of total food manufacturing value added of the largest firms increased (table 6). Note, for example, that the 50 largest food manufacturers accounted for 35 percent of food manufacturing value added in 1967, 40 percent in 1977, and approximately 43 percent in 1982.

Trends in aggregate concentration among the 20, 50, and 100 largest firms are well known; less well known is the trend among midsized, often regional, food manufacturers, with between 300 and 1,500 employees (table 6). These latter firms increased their share of value added in food manufacturing before 1972 and maintained it thereafter. Therefore, increases in aggregate concentration occurred largely at the expense of small (less than 100 employees) producers. It is unclear whether the largest firms are gaining at the expense of midsized companies.

Trends in aggregate concentration describe broad trends in the relative importance of large firms. More disaggregated data on market concentration in specific industries helps describe the extent of competition in those industries. Levels of market concentration in food manufacturing product classes remained stable, on average, during 1963-77. This stability in concentration reflected persistent small increases in advertising-intensive consumer product industries and small decreases in producer goods industries. Market concentration usually remains very stable over short periods, making any recent changes (concentration ratios from the 1982 Census of Manufacturing have yet to be released) likely to be small.

Important shifts in market structure are evident, however. Several producer goods industries (flour milling, soybean processing and, to a lesser extent, wet corn milling) recently underwent change as several major producers left each industry, while the largest producers expanded their shares. Market concentration increased considerably in those industries, even since 1982, and the same highly diversified producer goods firms are active in each.

This last observation highlights new trends in food manufacturing toward specialization. Some firms diversify across a set of consumer goods industries where advertising and new product introductions are important. Others now process, transport, and store a variety of agricultural commodities in producer goods industries. Still others specialize in producing a set of items sold to foodservice firms in the away-from-home eating market.

Recent data show that some firms among the 50 largest in food manufacturing became active in a higher number of food industries, and thus became more diversified, between 1976 and 1982. In total, the 50 largest food manufacturers participated in 405 food manufacturing industries in 1976, and 435 in 1982, a 7.4-percent increase. Major food manufacturers also expanded their interests in agriculture and in service-producing industries outside of manufacturing. The 50 largest food manufacturers increased in their number of nonmanufacturing industries 15 percent between 1976 and 1982. These trends in aggregate concentration, fewer firms, and diversification are often carried out through mergers.

Mergers

Mergers are grouped into several categories. Horizontal mergers occur when two competitors, firms in the same industry, merge. Large horizontal mergers between leading firms are usually blocked by antitrust authorities, so few of these type occur. Many small firms also join in such mergers. For example, 10 to 15 percent of the employees in baking and soft drink bottling were involved in a series of horizontal mergers between 1976 and 1984, as several regional bakers expanded into new areas and as major soft drink syrup producers encouraged the consolidation of their bottlers.

Conglomerate mergers constitute a second category in which firms in completely unrelated industries are joined. A wave of conglomerate mergers struck the food industries in the late 1960's, as firms such as IT&T, LTV, RCA, Gulf and Western, and Greyhound acquired leading food processors, and many large food companies expanded into nonfood activities. The logic of the conglomerate movement was never clear; conglomerate organization has no obvious operating advantages, and only tenuous financial advantages, over nonconglomerates. The conglomerate movement has recently reversed, as the previously mentioned nonfood companies have divested their food manufacturing operations. Prominent examples include IT&T's sale of Continental Baking to Ralston Purina, the spinoff of Wilson Foods by LTV, and RCA's sale of its Banquet Foods subsidiary to Conagra. Each of these transactions marked the exit of a large conglomerate from food manufacturing.

Recent acquisitions generally fall into a third category, related diversification (as have recent divestitures, since conglomerates' food units have usually been sold to food firms in related industries). Related diversification has some potential operating efficiencies for the firms involved, generally in the area of marketing. The firms involved may integrate their sales forces, economize on transportation and warehousing requirements, and shift their most effective product managers to new products. Commodity processors like Cargill and Archer-Daniels-Midland have expanded into related grain and oilseed processing, transportation, and storage activities. Brand name consumer food products firms like Campbell Soup and Reynolds Industries have expanded into product lines in which brand name recognition, new product introduction, and advertising are all important.

There are several examples of "blockbuster" mergers of related diversified consumer product food companies. Nestle acquired Carnation for $3 billion, while Beatrice paid $2.9 billion for Esmark, R.J. Reynolds paid $4.9 billion for Nabisco Brands, and Phillip Morris acquired General Foods for $6 billion. These prices far exceed previous records, even accounting for inflation. In a related trend, many food manufacturers have integrated into wholesaling, and replaced independent brokers with their own sales offices. The largest manufacturers expanded their sales organizations, while many smaller firms initiated sales offices within particular regions. As a result of these structural shifts, major food processors now specialize in functions rather than industries. These processors may join marketing and manufacturing as brand name consumer food product producers; they may combine storage, procurement, processing, and transportation as commodity processing and distribution specialists; or they may become foodservice suppliers emphasizing low-cost bulk production and product innovations for the away-from-home market.

Outlook

What are the consequences of these recent developments? First, if related diversifiers find real cost efficiencies, they can increase productivity growth in the industry. If producing multiple products does create cost efficiencies, then entry by new firms will become far more difficult, and aggregate concentration in food manufacturing may rise sharply. That rise will not necessarily lead to increased market power if diversified firms stand ready to enter profitable markets. The important issue for competition in the industry is how a shrinking number of highly diversified firms reacts in a wide range of markets.

In recent years, we've seen another source of entry by new competitors into the food industry. Foreign investment in U.S. food industries grew sharply between 1976 and 1982, then stabilized. Thirty foreign firms entered the United States during that period (and 18 firms, smaller than the entrants, left, for a net gain of 12 firms), raising the share of U.S. food manufacturing employment held by foreign firms from 3 percent to 4.2 percent in just 6 years. Although foreign firms still constitute a small share of the U.S. food industry, their share has grown, and they have the capacity to grow further still.

Foreign investment raises several important questions. First, will the growth in foreign investment continue? Second, who are the most likely foreign entrants? What countries are they from, what industries are they in, and what industries do they enter? Third, are they an effective source of new competition?

Consider growth first. The Nation's economy is becoming more internationalized, as real shipping and communications costs fall, and as incomes and tastes in foreign industrialized countries more closely approximate those here. Over the next 20-30 years, those trends should lead to steady increases in foreign investment in the United States and in U.S. investment overseas. Companies will become more internationalized as economies do. The pace of foreign investment in U.S. food industries has slackened in the last 4 years, however, after rapid growth during 1979-81, when a relatively low-valued dollar lowered the stock prices of U.S. firms relative to foreign companies, and made U.S. firms attractive acquisitions. The strong dollar of 1982-85 then reduced foreign acquisitions, even during a rising U.S. merger wave. If the dollar remains high on foreign exchange markets, then the pace of foreign investment in the United States will continue to be retarded.

Second, consider the characteristics of foreign entrants. Typically, foreign firms enter U.S. industries that are important in their home countries, where the firms have gained expertise. The largest entrants, accounting for 60 percent of employment in foreign-owned firms, are from the United Kingdom and are diversified producers of consumer food products. That is, they tend to be marketing-oriented firms. Cultural similarities, especially in language, and similar production and marketing techniques, probably explain the large British presence. Firms from several other countries rapidly expanded their U.S. holdings in a few industries. Japanese firms expanded rapidly in 1976-82, for example, largely in fish-processing industries where they process some of the U.S. coastal waters catch for the Japanese market and introduce new products and processes to the U.S. market. French firms also expanded their small share, chiefly in

dairy products (yogurt and cheese) and wines, both large domestic industries in France.

Are the foreign producers an effective source of new competition? The answer is uncertain. Some large multinational firms, such as Nestle and Unilever, are powerful competitors with identifiable strategies of their own. Other smaller firms, such as the Japanese fish processors or French dairy concerns, may also introduce innovative products or production processes, and thereby offer considerable new competition. Those new products, however, typically face limited markets and may not therefore be significant. Most new recent entrants have taken rather passive positions, neither aggressively expanding nor altering the strategies of their companies, so foreign ownership has not yet had major effects on the nature of competition in affected industries.

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FOOD WHOLESALING

The structure of the food wholesaling industry is changing rapidly.1/ Wholesale merchants' integration into food retailing as a profit strategy has introduced what may ultimately be a profound change in food distribution, erasing distinctions between food retailing and wholesaling. Leading merchant distributors are also diversifying into nonfood business lines, with some lines complementing their distribution activities, and others

1/ This section focuses on merchant wholesalers--firms that take title to products. Merchant wholesalers operate 75 percent of all wholesale food establishments. The remaining establishments are equally divided between manufacturers' sales offices and branches and offices of brokers and agents.

constituting independent profit centers of the wholesale firm. The primary vehicles for these changes continue to be mergers of large merchant wholesale firms with local and regional distributors, wholesalers' acquisition of retail units owned by chains and more recently, construction by wholesalers of large supermarkets operated by parent wholesale firms or licensed to independent retail operators. Wholesalers have also diversified into drugstores, general merchandise operations, foodservice supply companies, sports centers, truck leasing, food processing, and advertising.

Although merchant wholesale establishment numbers have remained remarkably stable, the size mix has changed. Fewer large wholesale merchants exist than did a decade ago. As these large wholesalers acquire other wholesalers, however, the frequency that the leaders face each other in local markets has markedly increased. During this same period, small- and mid-sized wholesaler numbers rose to service increasingly segmented local distribution markets. Thus, supermarkets, specialty food shops, convenience stores, restaurants, and other customers of wholesale distributors in the Nation's cities and market areas are now served by more distributors than a decade ago.

Current Trends

Merchant wholesalers account for $6 of every $10 of all wholesale sales, a share that has remained relatively constant over the past two decades (table 7). Their sales averaged $221 billion in 1984 and were holding at about the same annual rate late in 1985 (16). In real terms, merchants averaged a 3.7-percent annual sales growth during 1967-84.

For general line, limited line, and specialty merchant operations, the last wholesale Census (1982) counted 29,000 establishments with sales of $174.7 billion, or about $6 million per establishment (table 7). Among merchants, general line wholesalers operate the largest establishments, averaging $18 million in sales annually in 3,300 establishments in 1982. These general line wholesalers handle a broad line of groceries, household products, and health and beauty aids. Specialty wholesalers--operators who handle perishable lines such as frozen foods, fish, and fresh fruit--operated 18,400 establishments, averaging $4.7 million per establishment in 1982.

Limited line merchants also figure prominently in the wholesale distribution of food. These merchants distribute a narrow line of dry groceries dominated by canned foods, coffee, tea, spices, bread, and soft drinks; they offer few services compared with their general line counterparts. Operating 7,300 establishments in 1982, limited line merchants sold $26 billion worth of grocery products, or $3.5 million per establishment. Merchant wholesalers employed 503,000 workers in 1982, a 26-percent increase from 1967 and an average of 17 employees per establishment.

Increases in numbers of independent supermarket operations (fewer than 11 stores), rapid growth in convenience stores, and expanded service to chains (11 stores or more) all combined to expand the demand for food wholesalers' services. Retail food stores, chiefly independent supermarkets and small chains, are the main customers of merchant wholesalers. Retail sources account for 83 percent of general line wholesalers' volume, 39 percent of limited line merchants' sales, and about 41 percent of the sales of specialized wholesalers who deal in frozen foods, dairy products, poultry, meat, and similar perishables (13). The number of independent supermarkets increased in the late seventies as former chain stores passed to independent management and new nonchain stores were built. This growth of independent

Table 7--Sales volume, establishments, and employees, by type of grocery wholesaler

Sales volume, establishments, and employees, by type of wholesaler	1967	1972	1977	1982	1967	1972	1977	1982
	------- Billion dollars -------				---------- Percent ----------			
Sales volume:								
Specialty merchants	19.8	32.4	55.9	88.3	26.6	30.5	30.6	30.6
General line merchants	15.5	21.6	35.9	60.7	20.8	20.3	19.6	21.0
Limited line merchants	8.1	10.0	19.8	25.7	10.9	9.4	10.8	9.0
Manufacturers' sales offices	15.1	21.7	41.6	63.9	20.3	20.4	22.8	22.1
Agents and brokers	15.9	20.6	29.7	50.0	21.4	19.4	16.2	17.3
Total	74.4	106.3	182.9	288.6	100.0	100.0	100.0	100.0
	---------- Thousands ----------							
Establishments:								
Specialty merchants	20.0	20.8	19.6	18.4	50.0	54.0	51.7	47.8
General line merchants	2.5	2.8	2.7	3.3	6.2	7.3	7.1	8.6
Limited line merchants	8.8	6.3	6.9	7.3	22.0	16.4	18.2	19.0
Manufacturers' sales offices	4.3	4.0	4.2	4.7	10.8	10.4	11.1	12.2
Agents and brokers	4.4	4.6	4.5	4.8	11.0	11.9	11.9	12.4
Total	40.0	38.5	37.9	38.5	100.0	100.0	100.0	100.0
Employees:								
Specialty merchants	211.7	268.2	266.0	284.8	39.6	46.2	44.2	42.3
General line merchants	92.7	101.3	110.2	127.6	17.3	17.5	18.3	18.9
Limited line merchants	93.6	67.7	75.9	91.0	17.5	11.7	12.6	13.5
Manufacturers' sales offices	97.8	102.0	106.8	123.0	18.3	17.6	17.8	18.3
Agents and brokers	39.0	40.3	43.0	47.4	7.3	7.0	7.1	7.0
Total	534.8	579.5	601.9	673.8	100.0	100.0	100.0	100.0

Sources: (11, 12, 14, 15).

supermarket numbers relative to chains continues along with the increase in convenience stores and specialty food stores, expanding the retail base of merchant wholesalers.

Large foodchains also use independent wholesalers as well as their own internal distribution systems, frequently for fill-ins, less frequently as primary supply sources. Albertson's, the Nation's seventh largest chain, for example, receives a large portion of its supplies from independent wholesalers rather than its own warehouses. Independent wholesalers served one-fourth of all chain stores in 1984 (7). This proportion is likely greater now because many chains find it more economical to use auxiliary supply sources. In particular, chains tend to use independent wholesalers to supply their superwarehouse stores.

Services

Though often viewed as mere suppliers of groceries, wholesale food merchants provide many other services. Store layout, case label marking, sales reports, electronic ordering, shelf labels, and retail site selection are some of the services wholesale food firms now normally provide for their customers. About three of every four wholesale food merchants operating in 1982 provided some of these services (7). The demands of competition have likely caused more merchants to offer these basic services. Large wholesale firms also provide complete advertising for newspapers, radio, and television; insurance; equipment leasing and financing; market research; product quality testing; and consumer preference surveys.

The one-stop wholesale store binds retail customers to one supplier, contractually and financially. For example, wholesalers cosign leases, act as guarantors of equipment loans, and provide capital for inventory for retail customers. Retailers also benefit from wholesalers' advertising, point of purchase displays, and other promotions of the wholesalers' private-label brands. These brands in turn become identified with the retail store and make shifting to a new supplier with a new brand more difficult. The relationship between wholesaler and independent retail operator is mutually beneficial. The range of products and services makes independents competitive with chains, while protecting the wholesale supplier's market share. These services involve substantial overhead for wholesalers; the quest for ways to spread these costs partly explains the merger activity among these firms.

Structural Changes

The rise of national distributors and the integration into food retailing of leading wholesale distributors were the most significant developments in grocery wholesaling of the past decade.

Sales Concentration Trends

In an expanding market for wholesaler services, the 50 largest general line wholesale firms increased their national share of wholesale food sales from 48 to 64 percent between 1972 and 1982 (table 8). The 50 largest specialty firms also gained larger shares during this period, but the 50 largest limited line wholesalers' market share declined.

Leading general line wholesale firms have moved rapidly into new territories, primarily by acquiring existing wholesale firms. Between 1975 and 1981, the

Table 8--Sales concentration of grocery wholesale firms by type

Type of wholesaler	Sales accounted for by largest firms in the group								
	1972			1977			1982		
	4 largest	8 largest	50 largest	4 largest	8 largest	50 largest	4 largest	8 largest	50 largest
	Percent								
General line	9.9	16.2	47.5	15.0	22.4	56.6	17.4	26.5	63.6
Limited line	10.4	21.7	42.3	13.3	19.5	46.6	9.0	13.8	37.2
Specialty	7.2	10.9	26.5	10.3	15.1	33.5	14.9	20.9	34.0

Sources: (12, 14, 15).

period of most rapid change, second-ranked Fleming Companies expanded operations into 34 percent of the Nation's Standard Metropolitan Statistical Areas (SMSA's), up from 19 percent only 5 years earlier (9). Fleming expanded the most geographically, but all the leading firms increased the number of markets serviced. Industry leaders increasingly face each other in the same city or area as a result of mergers. Wakefern faced none of the leading wholesalers in its markets in 1975, but competed with one or more of the other leaders in 12 of its markets by 1981. Markets shared by Fleming with other leading wholesalers increased from 13 to 66 during the same period. This trend continues as industry leaders acquire other food wholesale firms.

Are there fewer wholesalers available to service local independent supermarkets and food stores as a consequence of these mergers? On the contrary, there are more local suppliers now than in the midseventies. The acquiring firms typically continue operating the acquired wholesaler as a separate division. The acquired wholesaler, with added resources from the parent firm, finds it easier to upgrade its physical facilities and expand the quantity and quality of services it offers.

Local distribution patterns have also changed, encouraging local entry by new firms. Several national chains have abandoned older cities, closing small stores or selling them to independent operators or local chains who are serviced, in turn, by independent wholesale suppliers. Independent retailers are building larger supermarkets, and the expanded volume has also increased wholesale demand. Convenience stores have grown, further expanding demand for wholesalers' services.

Mergers

Led by the major general line wholesale firms, wholesalers have expanded aggressively through mergers. These mergers are distinguished by the wholesalers' integration into food retailing and by their increasing diversification into nonfood lines.

Wholesale food firms initiated over 300 acquisitions of other businesses between 1973 and 1984 (table 9). About 59 percent were acquisitions of other wholesale food firms or a part-interest in them, 19 percent involved retail food stores, and 22 percent involved food manufacturers and nonfood retail firms. Five of the sales leaders in food wholesaling initiated 54 acquisitions of other firms during the same period (table 10); over half of these acquisitions were in business lines other than wholesale food.

Table 9--Wholesale food firms' acquisitions, by line of business acquired

Year	Line of business acquired			Total
	Wholesale food	Other food	Nonfood retail	
	Number			
1973	13	4	3	20
1974	22	3	5	30
1975	19	2	7	28
1976	14	5	6	25
1977	17	2	8	27
1978	11	2	3	16
1979	15	7	7	29
1980	31	5	12	48
1981	14	7	15	36
1982	17	10	5	32
1983	19	7	2	28
1984	19	13	4	36
Total	211	67	77	355

Sources: (1, 2).

Integration

Integration by wholesalers into food retailing has introduced a profound change in food distribution. About 3 percent of the 10,000 retail food stores served by the wholesale sales leaders in 1984 were wholesalers' corporate stores (table 10). Wholesalers have long acquired chains' supermarkets where chains have left markets; they also buy independent supermarkets. Wholesalers usually resell acquired supermarkets to independent operators; however, they have also retained some acquired facilities and remodeled them to test prototypes of retail food stores. Increasingly, the leading wholesalers are building larger stores, many of which are superwarehouse stores. Combining the scale of warehouse stores and the decor and variety of supermarkets, these giants involve capital outlays on a scale accessible only to operations with substantial retained earnings or with extensive credit lines. The great volume required to sustain profitability of these superwarehouse stores also means drawing on a customer base extending up to 25 or 30 miles, and drawing customers away from other retailers supplied by the wholesaler.

Table 10--Leading general line grocery wholesalers' acquisitions, by line of business acquired, and number of stores served and owned, 1972-84

Wholesale firm	Line of business acquired			Total	Retail stores served	Retail stores owned	
	Wholesale food	Other food	Nonfood retail				
	Number						Percent
Super Valu	6	3	2	11	2,319	79	3.4
Fleming Co's	8	3	2	13	3,400	68	2.0
Wakefern	0	0	0	0	193	4	2.0
Wetterau	6	8	1	15	1,720	91	5.3
Malone and Hyde	3	4	8	15	2,300	59	2.6
Total	23	18	13	54	9,932	301	3.0

Sources: (1, 2, 7, 8).

Wholesale firms' corporate ownership of retail supermarkets has prompted charges that wholesalers compete with the independent supermarkets whom they supply. Wholesalers rebut the charges, noting that wholesaler entry into retail foods followed the prospect that stores formerly supplied by the acquiring wholesaler would be sold to a chain or to a competing wholesaler (10).

Cooperative wholesalers in affected markets who have bought retail stores also say that the retail members are offered first refusal on purchase of supermarkets formerly served by the wholesaler. Retailers can seek another local wholesale supplier but this may be difficult, since retailers may be financially bound to the wholesalers now allegedly competing with them. Alternative suppliers may also impose minimum order sizes, have no private label products, and offer few of the support services (such as accounting systems or personnel training) that independent operators need to compete with chain supermarkets.

For large wholesale firms, large retail stores provide the means to increase profitability of the parent firm. Whether owned or licensed, warehouse stores of 50,000 square feet or larger generate tremendous wholesale volume.

Productivity and Profits

As measured by real sales per worker, productivity grew about 1 percent a year in wholesale operations between 1967 and 1982. The effects of advances in computers and in warehouse mechanization have yet to be felt industrywide, although individual firms have quickly adopted advanced technology.

The wholesale food industry remains labor intensive, which affects efforts to improve operations. The use of semiautomated equipment in warehouses,

warehouse remodeling, and the adoption of work standards are steps wholesalers have taken to improve productivity. A wide gap exists, however, between actual and potential productivity of labor. One recent study, for example, found that warehouses could reduce their direct labor requirements 17 percent simply by meeting existing labor standards established by industrial engineers (6).

Food wholesaling is also inventory intensive. Wholesalers turn over their inventory about 22 times a year; in other words, they complete the buy-stock-sell-profit cycle almost twice monthly.

One source of great potential savings for specialized wholesalers is consolidated warehousing, where vendors operating from scattered warehouse and distribution points, but serving the same customers, agree to combine orders and distribute from a common facility. Small noncompeting wholesalers are more likely to consolidate delivery than would large wholesalers with sufficient volume to justify economic operation of their own facility.

Consolidated warehousing is the most common approach when thinking of consolidation, but other alternatives are also available. Distributors can economize through efforts such as combined purchases of promotion goods from manufacturers and through joint purchase of advertising and the standardization of invoices, labels, and other business forms. Through such cooperative efforts, competing wholesalers can achieve savings that are unavailable to them individually (4). Truck leasing offers yet another channel for economizing by reducing costs of maintenance and operation of rolling stock, while retaining individual flexibility in moving goods and servicing customers.

The introduction and spread of the Uniform Communication Standards system (UCS) graphically illustrates the potential for reducing invoicing and billing costs. The system uses computer-to-computer transmission between grocery distributors and manufacturers which replaces typed, individual purchase orders and invoices. The system began in 1980 with a feasibility study commissioned by the grocery industry. Pilot programs began in 1982. By the end of 1984, UCS was used in 35 of the 53 major marketing areas in the country (8). In areas where one or more wholesale firms adopted UCS, the adopters had about an 11-percent market share of areas' supermarket sales.

Profit margins of wholesale firms compare favorably with others in the food distribution system. The median profit rate--after-tax earnings as a percentage of equity--was 13.8 percent for wholesale distributors handling a general line of groceries in 1982 (3). Specialty merchants averaged 16.9 percent and merchants handling limited grocery lines averaged a 15.1-percent return on equity. The top general line firms earned long-term profits with returns on equity ranging from 13 to 27 percent between 1980 and 1985 (5).

Outlook

General line wholesale firms will probably expand along two paths. First, wholesalers are likely to build more large retail stores. They have the requisite capital for site acquisitions, construction, and inventory. Large wholesalers can thus expand their volume through owning retail stores in growing areas and through licensing independent retailers where ownership may involve competing with the wholesalers' other retail customers. Second, large wholesale firms will continue entering new geographic areas by

acquiring local or regional distributors, thus achieving economies of scale in supplying financial and managerial services to their customers. Independent retailers will also continue to grow, reopening former chain stores in central cities. Independents have competed aggressively and successfully with chains by offering personalized service, supervising their operations closely, and receiving vital support from their wholesaler. The independents' success favors the continuing operation of those wholesalers who accept small orders, deliver frequently, and otherwise service low-volume retailers.

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FOOD RETAILING

The food retailing industry is one of the Nation's largest, both in number of retail outlets and in total sales. Food stores represent about one-seventh of all retail establishments and more than one-fifth of all retail establishment sales. Food stores had combined sales of $270 billion in 1984. Food retailing employed nearly 2.6 million people--one-sixth of all retail trade workers in 1984, up 19 percent from 1977, with women accounting for nearly half this number.

The food retailing industry has experienced declining growth since the early 1970s. The average annual increase in grocery store sales was 1.0 percent during 1977-82 after adjusting for inflation, compared with 3.3 percent during 1963-72. Not only has slower population growth affected retail food sales, but the share of the consumer's food dollar spent in retail food stores has declined as well. Smaller families, more working mothers, two-income families, and changing lifestyles have supported fast-paced growth of the foodservice sector at the expense of retail food sales. As the number of market areas experiencing even moderate growth has diminished, competition for the consumer's retail food dollar has heightened.

Given these prospects for slow industry growth, retailers strove to improve their competitiveness through new supermarket formats. The warehouse and superwarehouse store, the food and drug combination store and the superstore formats incorporate numerous cost-reducing and merchandising innovations. At the same time, these supermarket formats allowed retailers to address emerging consumer segments in the food retailing marketplace.

Warehouse supermarkets emphasize price above all else, to appeal to price-conscious shoppers. Warehouse supermarkets combine labor-saving stocking and shelving practices with a "no frills" approach to store design and services to operate on considerably lower gross margins than do conventional supermarkets. Superwarehouse stores contain a greater variety of products and often include service meat, deli, and seafood departments, but retain other warehouse store characteristics.

The expanded variety of products and services found in superstores (which contain many nonfood products) and combination food and drugstores (which contain a pharmacy) are geared to affluent customers. These two supermarket formats are larger than the traditional supermarket to accommodate expanded specialty and service departments, as well as an extensive selection of health and beauty aids, prescription and nonprescription drugs, and general merchandise items.

The warehouse and superwarehouse stores, the superstores, and the combination stores have grown largely at the expense of conventional supermarket sales. These new formats accounted for almost 40 percent of total grocery store sales in 1985.

The entry of warehouse and superwarehouse retailers into a market has often produced aggressive behavior among existing competitors. Many chain retailers have demanded wage and benefit concessions from their employees in order to compete more effectively. Supermarket retailers have also reduced labor costs by introducing optical scanning in place of individual item price marking and boxed beef and tray-ready beef has replaced retail fabrication to reduce meat cutting and packaging labor. Energy management

and monitoring systems are used to control energy use, and electronic surveillance systems promise to reduce shoplifting.

Retailers have also merged with or acquired other food retailers to enter growth areas, as well as to make fuller use of existing warehousing and private label manufacturing capacity. While consolidation in the food retailing industry through mergers and acquisitions continues at a very high rate, this rate is comparable to that of other industries today.

Composition of the Industry

Food stores numbered nearly 242,000, with combined sales of $246 billion, in 1982. Grocery stores--supermarkets, smaller grocery stores, and convenience stores--accounted for 94 percent of food store sales, but for only 70 percent of all food stores. Specialty food stores such as bakeries, delicatessens, butcher shops, produce stands, candy stores, and dairies accounted for the remainder. The number of food stores and grocery stores continued to decline between the 1977 and 1982 Censuses of Retail Trade (table 11).

Table 11--Number and sales of food stores, selected years

Year	Food stores 1/		Grocery stores as a proportion of food stores	Food store sales		Grocery store sales as a proportion of food store sales
	Total	Grocery stores 2/		Total	Grocery stores	
	- Number -		Percent	Billion dollars		Percent
1939	560,549	387,337	69.1	10.2	7.7	76.0
1954	384,616	287,572	74.8	39.8	34.9	87.8
1958	355,508	259,796	73.1	50.3	43.7	86.9
1963	319,433	244,838	76.7	57.2	52.6	91.8
1967	294,243	218,130	74.1	69.4	64.2	92.6
1972	267,352	194,346	72.7	99.0	92.3	93.2
1977	252,853	179,042	70.8	157.9	147.8	93.6
1982	241,737	168,041	69.5	246.1	230.7	93.5
1984	NA	NA	NA	270.0	252.9	93.7

NA = Not available.

1/ Retail outlets which have at least 50 percent of sales in food products (SIC 54).

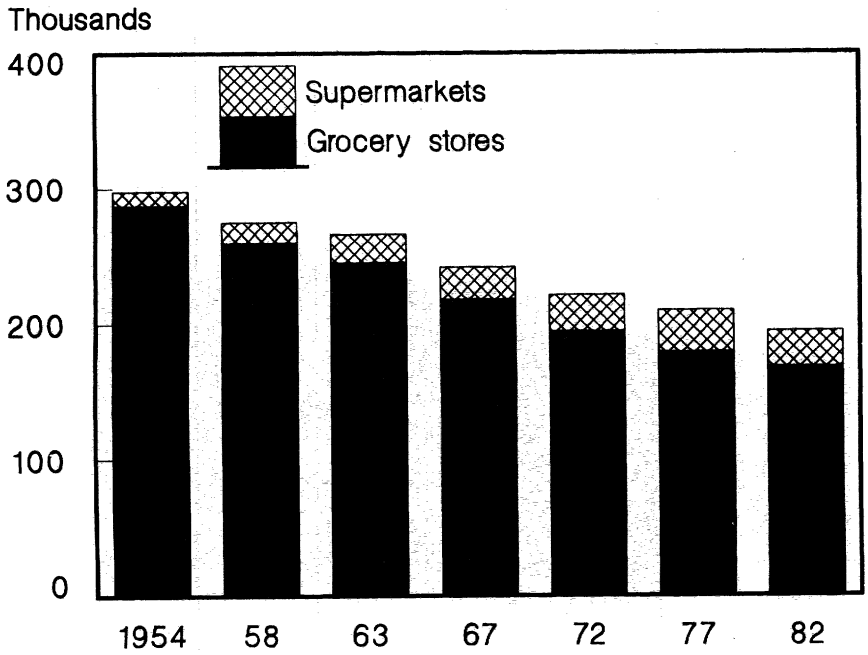
2/ Food stores which sell a variety of products including fresh meat, produce, dry groceries, household supplies, and other nonfood items (SIC 541).

Sources: (8, 9).

Supermarkets

The advent of the supermarket in the late 1930's revolutionized the food retailing industry. The supermarket's self-service feature spawned the trend toward larger stores, which in turn meant fewer stores were needed. The number of grocery stores declined by more than 100,000, from about

Figure 3
Grocery stores and supermarkets



Source: (8).

288,000 in 1954 to 168,000 in 1982 (fig. 3). While the number of grocery stores fell, the number of supermarkets rose steadily from about 10,500 in 1954 to nearly 31,000 in 1977. Supermarkets' share of grocery store sales surged from 41 percent in 1954 to 75 percent in 1977 (table 12).

Since 1977, supermarkets' sales share has leveled off as market areas have become more saturated. The number of supermarkets fell 15 percent between 1977 and 1982, from about 30,800 to about 26,600. The decrease in the number of supermarkets since 1977 may be partly due to the introduction of stores considerably larger than the conventional supermarket.

In 1982, supermarkets constituted 14 percent of all grocery stores, but captured 76 percent of grocery store sales (table 13). In contrast, smaller grocery stores, including superettes and convenience stores, composed 84 percent of all grocery stores, but accounted for only 24 percent of grocery store sales.

Alternative Supermarket Formats

Alternative supermarket formats began during the 1970s, as slowing real sales growth and rising costs pressured food retailer profits downward. Food shoppers, faced with rising inflation, became increasingly price conscious at the same time. Because of the emphasis on operating costs and price competition, food retailers began to experiment with the warehouse and superwarehouse store, the combination food and drug store, and the superstore, each which had distinct competitive advantages over the conventional supermarket.

Table 12--Number and sales of supermarkets, selected years

Year	Annual sales of at least ... 1/	Number of supermarkets: Total	Number of supermarkets: As a proportion of grocery stores	Supermarket sales: Total	Supermarket sales: As a proportion of grocery store sales
	$ thousand	Number	Percent	$ million	Percent
1935	302.9	386	0.1	202	3.2
1939	287.5	1,699	.4	772	10.0
1948	635.6	5,600	1.6	5,654	22.8
1954	703.4	10,506	3.8	14,214	41.3
1958	747.0	15,282	5.9	23,562	53.9
1963	762.9	21,167	8.6	31,484	59.9
1967	825.7	23,808	10.9	43,433	66.7
1972	1,000.0	27,231	14.0	64,960	69.6
1977	1,545.3	30,831	17.2	113,111	75.0
1982	2,313.2	26,640	15.8	175,655	76.2

1/ To be classified as a supermarket, a grocery store had to generate annual sales of at least $1,000,000 in 1972; other years are calculated using an index of prices of all products sold in grocery stores. Sales include sales taxes, which were excluded from Census figures after 1972.
Source: (13).

Table 13--Number and sales of grocery stores, 1982

Grocery store type	Stores: Number	Stores: Percent	Sales: $ billion	Sales: Percent
All grocery stores	168,041	100.0	230.7	100.0
Supermarkets 1/	26,640	15.8	175.7	76.2
Smaller grocery stores including superettes and convenience stores	141.401	84.2	55.0	23.8

1/ Grocery stores with annual sales of $2,313,200 or more in 1982.
Source: (7).

Warehouse retailers take advantage of cost savings in several ways. Labor costs are reduced by replacing individual item stocking and shelving with box, case, and pallet size displays. Individual item price marking and bagging and carryout services are also eliminated. Merchandise costs are reduced through volume purchases of products available at a manufacturer's special discount. Overhead costs and capital investment are minimized by limiting interior appointments, reducing the number of refrigerated and frozen items, and by locating stores in less desirable areas. These cost savings allow gross margins (markup as a percent of sales) for warehouse

retailers to be as low as 12 percent, compared with conventional supermarket gross margins of 18 to 21 percent.

The superwarehouse format has recently been attempted to win more shoppers accustomed to the features of a conventional supermarket. The superwarehouse store maintains the cost and operating advantages of the warehouse concept but adds service departments such as fresh meat and seafood, delicatessen, and bakery.

A recent study counted 90 superwarehouse stores operating in 1985. Supermarket Insights' survey of 43 of these stores found store size ranging from 50,000 to 140,000 square feet, with store sales of $13 million to greater than $50 million per year. Customers traveled as far as 25 miles to shop at these superwarehouse stores.

Superstores are expanded conventional supermarkets ranging in size from 35,000 to 55,000 square feet of selling area. They offer greater variety of products, specialty departments, and services, including considerable nonfood (general merchandise) products. The combination food and drugstore format brings together grocery products, a pharmacy, and a larger assortment of nonprescription drugs and health and beauty aids than found in conventional supermarkets. These combination stores are equal to or often greater in selling area and sales volume than superstores, averaging about 50,000 square feet.

Conventional supermarkets average the highest gross margins of all supermarket formats due to their generally higher operating costs. They range in size from 10,000 to 25,000 square feet of selling area. Smaller selling area restricts the variety of products available, averaging 9,000 to 11,000 items, and dictates fewer service departments. While conventional supermarkets dominated supermarket retailing until the early 1970's, today their sales constitute less than one-half of supermarket sales nationally (table 14).

Table 14--Number and sales of supermarkets, by format, 1982

Store format	Stores		Sales		Sales as a proportion of grocery store sales
	Number	Percent	$ billion	- Percent -	
All supermarkets	26,640	100.0	173.1	100.0	75.0
Conventional	17,107	65.0	82.9	47.9	35.9
Superstore	4,600	17.5	50.1	28.9	21.7
Warehouse	3,670	13.9	25.8	14.9	11.2
Combination	950	3.6	14.3	8.3	6.2

Source: (7).

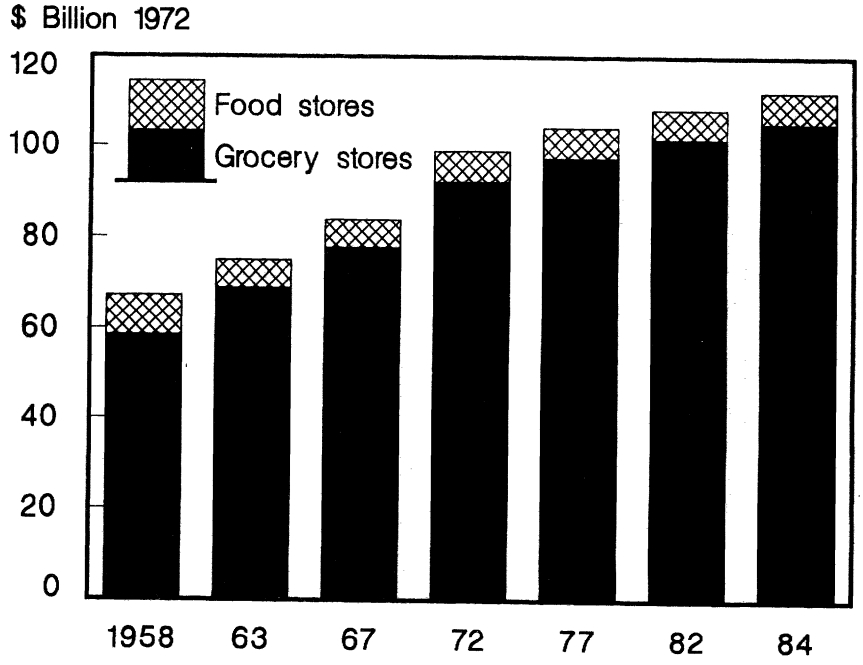
Sales

Food store sales grew by $14.2 billion in 1984; adjusted for inflation, sales increased 1.8 percent annually. The two major components of food stores--

grocery stores and specialty food stores--had real growth rates of 1.8 percent and 1.5 percent, respectively.

Food store and grocery store sales, adjusted for inflation, each grew at compound annual rates of more than 3 percent between 1958 and 1972, less than 1 percent between 1972 and 1982, and nearly 2 percent between 1982 and 1984 (fig. 4).

Figure 4
Food store and grocery store sales



Source: (7)

The significantly slower rate of increase in foodstore sales between 1972 and 1982 stemmed from a combination of factors. The population growth rate slowed to less than 1 percent per year. In the supermarket industry, stores kept getting bigger and, in the late 1970's, overstoring, from the industry's viewpoint, became a serious concern. Foodstore retailers also lost overall food market share to foodservice operators. By 1982, 40 cents of each dollar spent for food went to foodservice operators.

Food retailers developed other strategies to gain market share. Many firms entered markets experiencing growth, such as the "Sun Belt" States. Food retailers responded to the growing popularity of convenience and prepared foods by installing salad and soup bars, adding instore bakeries and delicatessens, and providing cut and prepared produce. Some supermarkets now also offer an instore restaurant.

Innovations in Convenience Stores

Convenience stores--small grocery stores which offer a limited number of high-volume food and nonfood products and are usually open long hours--have exploited many opportunities for growth. Convenience stores have continued to maintain high growth rates by introducing such products as self-service gasoline and self-service fast food. A number of convenience store retailers

installed limited-menu food service, often with customer seating as well as carryout service.

Gasoline sales constituted 42 percent of convenience store sales in 1984, up from 7 percent in 1975 (table 15). Fast food sales were up 50 percent in 1984 from 1975, reaching 6.1 percent of sales.

Table 15--Convenience store sales by major product category, 1984

Category	Sales	
	$ billion	Percent
Gasoline	14.3	42.1
Tobacco	3.1	9.1
Groceries	2.5	7.4
Fast food	2.1	6.1

Source: (5).

The number of convenience stores increased from 26,600 in 1974 to 42,950 in 1984 (table 16), with their share of grocery store sales rising from 4

Table 16--Number and sales of convenience stores

Year	Number of stores		Sales		
	Total	With gasoline	Total	Nongasoline	Gasoline
	--- Number ---		-------- $ billion --------		
1971	19,000	NA	3.6	NA	NA
1972	21,000	NA	4.2	NA	NA
1973	24,000	NA	5.1	NA	NA
1974	26,600	NA	5.3	4.9	0.4
1975	28,500	NA	6.2	5.5	.7
1976	27,400	7,400	7.4	6.3	1.1
1977	30,000	9,600	8.9	7.4	1.5
1978	32,500	11,500	10.6	8.7	1.9
1979	34,125	14,100	14.1	10.5	3.6
1980	35,800	15,750	18.9	12.4	6.5
1981	37,800	17,500	22.8	14.1	8.7
1982	38,700	18,800	25.4	15.1	10.3
1983	40,400	20,400	28.3	16.5	11.8
1984	42,950	22,475	34.0	19.7	14.3

NA = Not available.
Source: (5).

percent to 12 percent. Although convenience stores are still experiencing real growth, the growth rate has slowed since the expansion of the 1960's and 1970's.

Industry Structure and Organization

Although no food retailers are considered national in size, a handful of very large firms account for a significant share of total industry sales. The largest 20 food retailers operated 80,623 grocery stores in 1982 with sales of $80.6 billion. The top 50 food firms owned 101,184 stores with combined sales of $101.2 billion in 1982.

The share of grocery store sales held by the largest 20 food retailers increased from 27 percent in 1948 to 34 percent in 1958 (table 17). Since

Table 17--Market share of 20 leading grocery chains, census years 1948-82

Rank	Share of total grocery store sales							
	1948	1954	1958	1963	1967	1972	1977	1982
	Percent							
Four largest chains	NA	20.9	21.7	20.0	19.0	17.5	17.4	16.1
Eight largest chains	NA	25.4	27.5	26.6	25.7	24.4	24.4	23.6
Twenty largest chains	27.0	29.9	34.1	34.0	34.4	34.8	34.5	34.9

NA = Not available.
Source: (8).

1958, however, industry concentration has increased negligibly; the top 20 firms' share was just 35 percent in 1982. Nevertheless, turnover among the top 20 food retailers since 1958 has been considerable, which belies their otherwise stable share of total sales.

Chains and Independents

The share of grocery store sales held by chains--food retailing firms owning 11 or more stores--increased steadily from 34 percent in 1948 to 60 percent in 1982 (table 18). Since 1982, however, the chains' share of grocery store sales appears to have leveled off. Chain stores as defined here include supermarkets as well as convenience store chains. Several factors have been cited for chains' slower growth in recent years:

- Most markets are experiencing slow growth. Under stable market conditions, chains often are able to gain sales share only at the expense of other chains.

- Low-cost competitors such as warehouse supermarkets have heightened competition in many areas.

Table 18--Chains' share of grocery store sales, census years 1948-82

Chain type	1948	1954	1958	1963	1967	1972	1977	1982
				Percent				
Supermarket	NA	34.8	41.2	43.7	46.3	48.9	46.9	NA
Other	NA	4.6	2.8	3.3	5.1	7.0	12.0	NA
Total	34.4	39.4	44.0	47.0	51.4	55.9	58.9	60.0

NA = Not available.
Source: (7).

- Independent retailers--firms with 10 or fewer stores--have successfully operated supermarkets that chains abandoned because of high costs or aggressive competition.

- Independent retailers have also taken advantage of chains' procurement and operating economies through affiliation with full-service food wholesalers.

Mergers and Acquisitions

Food retail mergers and acquisitions reached new heights in 1984. The sales value of acquired firms totaled $9.5 billion, breaking a previous record of $9.3 billion in sales set in 1979 (table 19). Other food retailers and

Table 19--Mergers and acquisitions in food retailing, selected years

Year	Acquisitions of food retailing firms			Sales of acquired firms
	By food retailing firms	By firms outside food retailing	Total	
	Number			$ billion
1979	NA	NA	NA	9.3
1982	14	9	23	3.7
1983	12	12	24	8.1
1984	30	15	45	9.5

NA = Not available.
Source: (1).

wholesalers account for the majority of these acquisitions. While most mergers and acquisitions in food retailing represent geographic expansion, the number of horizontal mergers--in which both firms were previously competitors in the same market--has increased since 1980. Notable mergers and acquisitions in recent years include the Kroger-Dillon merger in 1982

with combined sales of $14 billion, American Store's acquisition of Jewel Company in 1984 for $1 billion, and Supermarkets General's acquisition of Purity-Supreme in 1984 for $750 million.

Performance Measures

Profits in food retailing depend largely on the general economy, including inflation and employment levels. Other less predictable factors such as price wars, labor unrest and strikes, and supply shortages or interruptions usually affect some market areas but not others.

Net income as a percentage of total equity for larger food retailers fell after 1981 during the recession period but appears to have recovered in 1984.

Return on stockholders' equity

Year	Profit measure 1/
1981	15.4
1982	12.6
1983	12.7
1984	16.3

1/ Annual rate of profit on stockholders' equity after taxes, SIC 54 firms with assets of $25 million or more.
Source: (2).

Input Costs

Beside the cost of grocery products, the most important input cost for food retailers is labor. Labor costs made up 56 percent of store operating expenses in 1984, the lowest level since 1977, according to a survey of 46 grocery chains by Cornell University (table 20). Average hourly earnings of nonsupervisory employees in food retailing rose only 1.8 percent in 1984, compared with 4 percent in 1983 (table 21). Energy costs continued to climb, however, reaching nearly 6 percent of store operating expenses in 1984 (table 20).

Wage and Labor Cost Differences

Increased competition during the early 1980's prompted many food retailers to review their labor costs. Warehouse store retailers enjoyed a significant cost advantage over their conventional supermarket competitors. Even among conventional supermarkets, independent retailers frequently paid less than union scale wages and benefits. Chainstores, often the largest employer in retail food markets, were more likely than their independent counterparts to have union-organized labor with its higher level of wages and benefits. Consequently, demands by large food retailers for wage and benefit "givebacks" developed in many market areas.

A 28-city survey of supermarkets in 1982 found significant differences in average hourly labor costs. The survey collected data on total payroll, labor hours, and value of fringe benefits. Average labor cost per hour was then calculated for each supermarket. The supermarket chains' average

labor cost per hour was higher than the independents' in all 28 cities. This cost difference amounted to as little as $1.08 an hour in one city to as much as $9.14 an hour in another (table 22). The median hourly cost difference was $3.26; the average hourly cost difference was $3.60.

Similarly, supermarkets that employed union workers had higher average hourly labor costs than those that hired nonunion workers in all but one city. A high proportion of the independent retailers had nonunion employees.

Efforts to reduce labor costs were especially strong in markets with slower growth, and where independents (including warehouse stores) have considerable market shares. Some retailers resigned from bargaining councils, organizations where retailers in a market join together to negotiate with unions on wages and benefits. Many retailers announced wage

Table 20--Supermarket operating expenses

Year 1/	Payroll	Energy	Other
	Percent		
1975-76	54.8	4.9	40.3
1976-77	56.0	4.7	39.3
1977-78	56.2	4.9	38.9
1978-79	57.7	5.1	37.2
1979-80	57.9	5.0	37.1
1981-82	58.1	5.7	36.2
1982-83	58.9	5.5	35.6
1983-84	56.3	5.7	38.0

1/ April-March (12-month period).
Source: (4).

Table 21--Average hourly earnings of production and nonsupervisory grocery store employees

Year	Amount/hour	Year-to-year change
	Dollars	Percent
1977	4.92	NA
1978	5.40	9.76
1979	5.85	8.33
1980	6.45	10.26
1981	7.10	10.08
1982	7.48	5.35
1983	7.78	4.01
1984	7.92	1.80

NA = Not applicable.
Source: (10).

Table 22--Average hourly labor cost differences between chain supermarkets (C) and independents (I) and between supermarkets with union workers (U) and those with nonunion workers (NU)--28 cities, 1982

Measure	C-I difference	U-NU difference
	$/hour	
City minimum	1.08	-0.73
City maximum	9.14	9.36
All-city average	3.60	3.82
All-city median	3.26	3.29

Source: (7).

freezes and renegotiation of current labor contracts to obtain concessions and "givebacks" from their employees. Retailers in many cities threatened to close their doors unless labor costs could be reduced. Kroger, one of the country's largest food retailers, pulled out of Pittsburgh, Erie, Akron, and Baton Rouge. Kroger management cited competitive pressures and wage levels which fell short of parity with their competitors as reasons for taking such drastic measures.

Although reductions in basic wage rates were important concessions, changes in work rules were also at issue. These work standards define certain wage premiums and differentials, such as conditions under which overtime is paid and the wage rate premium for night hours. Other work rules define the staffing hours for certain departments such as fresh meat. Retailers were able to obtain work rule concessions in some instances in lieu of basic wage cuts. A retailer in Northern Ohio won a concession that removed premium pay from Sunday and holiday hours. Other rule changes created a two-tier wage structure in which new employees were paid considerably lower wages for similar work.

Overall, retailers were quite successful in reducing labor costs. After 1982, the average hourly earnings of food retailing employees grew at a slower rate than at any time since 1977.

Technology and Productivity

Labor productivity (output per hour of all persons employed) in retail food stores has remained low since peaking in the early 1970's (table 23). While

Table 23--Output per employee hour in retail food stores

Year	Output per hour of all persons employed 1/	Year-to-year change
	1977=100	Percent
1970	109.8	5.6
1971	110.4	.5
1972	110.3	- .1
1973	105.5	-4.4
1974	101.1	-4.2
1975	100.7	- .4
1976	102.0	1.2
1977	100.0	- .2
1978	95.7	-4.3
1979	98.0	2.4
1980	100.8	2.8
1981	98.2	-2.6
1982	96.9	-1.4
1983	97.1	.2

1/ All persons include paid employees, unpaid family workers, and the self-employed.

Source: (10).

productivity in 1983 (the last year for which data is available) stabilized at 1982 levels after falling from 1980, it remains below the 1977 index. Future productivity improvements may be partially offset by an expansion of labor-intensive service departments found in many supermarkets.

Efforts to increase productivity include labor-saving methods found in the warehouse store concepts, the use of price scanning equipment to eliminate price marking and speed checkout, and the introduction of boxed beef to reduce meatcutting and packaging labor. Another factor contributing to greater labor productivity is the continued replacement of smaller stores with larger ones able to benefit from economies of size.

Electronic price scanning was introduced to food retailing in 1977. By October 1985, grocery stores with optical scanning devices numbered over 11,000, up from about 6,500 at the end of 1982 and 3,000 at the end of 1980. The share of total grocery dollar sales accounted for by scanner-equipped stores was less than 15 percent in 1980, but nearly 50 percent by 1985. Most scanner-equipped stores are supermarkets, although more and more convenience stores are installing scanners (11).

A recent survey of 128 retailers by the Food Marketing Institute indicates how scanning data are being applied to a store's operation (table 24).

Table 24--Retailer use of scanning data

Application	Retailers using application
	Percent
Checker performance	96.9
Specials	83.6
Coupon accounting	65.6
Work scheduling	62.5
New product evaluation	50.8

Source: (3).

Data provided by optical scanners will allow food retailers to increase labor productivity, improve price reading accuracy, evaluate product movement and profitability, and promotion effectiveness. Scanning data may also be linked to a computer-based management information system monitoring all aspects of the retailing operation.

The industry has also benefited from the development of energy management and monitoring systems. Automated monitoring systems for refrigerated perishables have helped ensure that the full shelf life of the product is achieved, and has reduced energy costs.

Some food retailers are experimenting with electronic article surveillance (EAS) systems to prevent shoplifting. EAS is an electronic marking system which may only be "erased" through the store's checkout process. Where EAS

systems have been installed, retailers have reduced or eliminated plain clothes detectives, TV monitoring devices, and uniformed guards. EAS systems may also reduce legal costs associated with prosecution. Although initial costs are great and the required product marking is continuous, retailers using EAS report an average 1.5 percentage point improvement in gross margins.

Outlook

The trend since 1977 toward fewer but larger supermarkets will probably continue. Grocery store capacity (that is, sales, adjusted for inflation, and selling area square footage) is still expanding, as many smaller supermarkets are replaced by superstores with 35,000 to 55,000 square feet of selling area and by superwarehouse stores and other large hybrid store formats, ranging from 45,000 to 200,000 square feet. In addition to potential size economies, these larger operations allow greater merchandising and ordering flexibility through delivery of many products direct from the manufacturer. The number of convenience stores also continues to grow (up more than 40 percent since 1977), and will probably do so in the near future.

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FOOD SERVICE

The foodservice industry, with more than 700,000 away-from-home eating establishments and $158 billion in food and nonalcoholic beverage sales in 1984, is a major market for food produced on the Nation's farms.

Growth in food service has been phenomenal. While at-home food expenditures (adjusted for inflation) increased at a compound annual rate of 1.3 percent during 1954-84, away-from-home food expenditures increased twice as fast, or 2.7 percent per year. Disposable personal income (DPI) gained 3.6 percent annually during the same period; total U.S. population increased at an average annual rate of 1.3 percent.

Growth in expenditures for food away from home equaled growth in DPI for 1960-70 (each increased about 100 percent) but exceeded growth in DPI for 1970-80, 203 percent versus 163 percent. Expenditures for meals and snacks in the commercial foodservice sector, composed of establishments operating primarily for profit, increased 227 percent during 1970-80. Increasing incomes spawned foodservice growth during both periods. Foodservice growth was also boosted in the 1970's by vast social and demographic changes that heightened consumer demand for convenience and by large increases in government entitlement programs such as Medicare and the National School Lunch Program (NSLP). Rising per capita income, a growing number of both married and single women in the workforce, more families living on two incomes, smaller households, more people in the 25 to 44 age group (which is inclined to eat out more often), a very mobile populace, the national inclination to purchase greater convenience, and the advertising efforts of large foodservice chains all led to the consumer's tendency to spend more of the food dollar away from home.

Composition of the Industry

The foodservice industry consists of many individual market segments, commonly divided into commercial and noncommercial sectors (table 25). Commercial foodservice establishments exist for profit. The primary purpose of noncommercial foodservice operations in establishments such as nursing homes, child daycare centers, factories, and the military is viewed as rendering a feeding service rather than making a profit, although some such operations may generate a profit.

Separate eating places (often abbreviated to eating places) are defined as those outlets that derive revenue mainly from sales of meals and snacks. They constituted 62 percent of commercial foodservice establishments in 1984 and accounted for 86 percent of sales. The remaining sales in this sector are in outlets that are part of a larger facility whose foodservice sales are less than other revenues. This may include a hotel restaurant or drugstore lunch counter.

Number of Foodservice Establishments

Away-from-home eating establishments in the United States totaled 706,098 in 1984, up 13 percent from 624,507 in 1977 (table 25). The 1984 commercial sector contained 409,453 outlets, and the noncommercial sector, 296,645. The number of eating facilities rose 33 percent between 1977 and 1984 in the noncommercial sector, with big increases in the areas of child daycare, facilities such as nursing homes and homes for the handicapped, and elderly feeding programs. The number of outlets in the commercial sector rose but 2 percent during the same period, although the number of fast food outlets increased 23 percent. The number of cafeterias and the number of separate drinking places each declined 19 percent.

Table 25--Number of foodservice establishments, sales of meals and snacks, and percentage change in real sales

Industry segment	Number of establishments			Sales of meals and snacks			Percentage change in real sales (1977-84) 1/
	1977	1984	Change	1977	1984	Change	
	- Number -		Percent	Million dollars		- Percent -	
Commercial feeding	401,502	409,453	2.0	56,624	116,095	105.0	23.2
Separate eating places	229,892	253,854	10.4	47,426	99,582	110.0	26.1
Restaurants, lunchrooms	118,896	124,433	4.7	24,720	48,419	95.9	17.7
Fast food outlets	100,493	123,769	23.2	20,334	47,319	132.7	39.8
Cafeterias	7,001	5,640	-19.4	1,813	3,022	66.7	.1
Lodging places	25,931	23,262	-10.3	3,613	7,264	101.0	20.8
Retail hosts	60,652	56,348	-7.1	2,691	4,779	77.6	6.7
Recreation, entertainment	33,619	34,282	2.0	1,915	3,394	77.3	6.5
Separate drinking places	51,408	41,706	-18.9	979	1,076	9.9	-34.0
Noncommercial feeding	223,005	296,645	33.0	25,152	42,390	68.5	8.0
Education	97,325	95,888	-1.5	8,242	12,239	48.5	-1.9
Elementary, secondary	91,300	89,600	-1.9	5,886	7,930	34.7	-6.4
Colleges, universities	3,095	3,288	6.2	2,256	4,092	81.4	9.0
Other education	2,930	3,000	2.4	100	217	116.7	30.2
Plants, office buildings	15,187	15,846	4.3	3,576	6,793	89.9	14.1
Hospitals	7,099	6,861	-3.4	3,711	5,817	56.8	-5.8
Care facilities	21,117	28,933	37.0	2,388	5,281	121.2	53.6
Vending	3,737	3,556	-4.8	2,508	3,553	41.7	-14.9
Military services	3,971	3,352	-15.6	1,595	2,366	48.3	- .5
Troop feeding	1,435	1,310	-8.7	1,245	1,765	41.8	-1.5
Clubs, exchanges	2,536	2,042	-19.5	350	601	71.7	3.2
Transportation	799	642	-19.6	1,079	1,922	78.2	7.1
Associations	18,966	19,394	2.3	958	1,562	63.0	-2.1
Correctional facilities	6,907	7,164	3.7	492	1,155	134.6	63.0
Child daycare	18,967	84,175	343.8	249	760	204.9	111.8
Elderly feeding programs	11,173	14,035	25.6	202	689	240.4	136.5
Other	17,757	16,799	-5.4	151	252	67.3	.5
Total	624,507	706,098	13.1	81,776	158,485	93.8	18.4

1/ Consumer Price Index (100 = 1967).

Food Use and Sales

Foodservice establishments received 72 billion pounds of food in 1984, up 14 percent from about 63 billion pounds in 1977 (16). The commercial sector received 60 percent of the total. Separate eating places received 34 billion pounds, with 17 billion going to restaurants and lunchrooms, 15 billion to fast food places, and 2 billion to cafeterias. In the noncommercial sector, schools and colleges received 13 billion pounds of food in 1984.

Total sales of meals and snacks (excluding alcoholic beverages) at foodservice establishments amounted to $158 billion in 1984, compared with $82 billion in 1977, an increase in real sales (adjusted for inflation) of 18 percent. Fast food places' real sales rose 40 percent between 1977 and 1984.

Real sales grew less than 0.5 percent in 1980 and 1981 and actually fell in the commercial sector in 1980 and in the noncommercial sector in 1982 (table 26). Factors contributing to slow growth, particularly in the commercial sector, included declines in real per capita disposable personal income in 1980 and 1982, a sharp drop in median family income during 1979-82, high energy prices (which not only meant increased costs for foodservice operations but also influenced consumers to stay home more), and greater increases in foodservice menu prices than in grocery store prices.

Table 26--Year-to-year change in the real (adjusted for inflation) GNP, per capita DPI, and sales of meals and snacks at establishments with food service

Item	1978/77	1979/78	1980/79	1981/80	1982/81	1983/82	1984/83
				Percent			
Real GNP	5.0	2.8	-0.3	2.5	-1.0	3.7	6.8
Real per capita DPI	3.8	1.6	- .5	1.7	- .1	2.5	5.8
Real foodservice sales	2.9	2.3	.1	.3	2.3	5.1	4.3
Commercial sector	4.1	2.5	- .7	.1	3.4	6.6	5.5
Noncommercial sector	.4	1.8	2.0	.7	- .3	1.8	1.3

The Consumer Price Index (CPI) for food away from home was up 15 percent during 1980-82, compared with 11 percent for food purchased for at-home consumption.

Real sales in the noncommercial foodservice sector rose 2.0 percent during the 1980 recession, in contrast to the decline in commercial sales. The noncommercial sector was initially somewhat insulated from the recession because of a lag in adjustments of government entitlement and subsidy programs and foodservice budget allotments in private institutions. Real foodservice sales in the noncommercial sector declined in the 1982 recession, however, following 1980/81 legislation reducing Federal subsidies for

school foodservice programs and numerous other Federal, State, and private sector cost containment efforts. Reduced subsidies for the NSLP contributed to a drop in the number of NSLP lunches served from 4.2 million in 1980 to 3.7 million in 1982, for a drop of 1.3 billion pounds in the amount of food going to schools.

The economic upturn in 1983 and 1984, characterized by sizable increases in GNP and per capita DPI, lower rates of price inflation and unemployment, and lower energy prices, spawned significant increases in foodservice sales. Real sales jumped 5.1 percent and 4.3 percent, respectively, in 1983 and 1984. Commercial foodservice inflation-adjusted sales jumped 6.6 percent in 1983 and 5.5 percent in 1984; real sales at fast food outlets soared 10 percent in 1983 and 8.4 percent in 1984. Noncommercial sales lagged, still constrained by government and institutional cost containment measures.

Labor Force

The trend of eating outside the home will result in continued employment growth among food and beverage preparation and service occupations. About 2.1 million or 8 percent of the 25.6 million new jobs that the U.S. economy is expected to generate during 1982-95 should occur in food service, according to projections by the Bureau of Labor Statistics (BLS). Foodservice employment in 1982 was conservatively estimated at 6.2 million, and BLS projections call for industry employment by 1995 to total 8.3 million, or an increase of about one-third.

Separate eating and drinking places in the commercial sector should probably generate 1.8 million of the projected 2.1 million new foodservice jobs. Workers at fast food places, waiters/waitresses, and cooks are three foodservice occupations for which better-than-average growth is projected. BLS also projects 141,000 new management positions in restaurants, cafes, and bars, or an increase of 24 percent from 574,000 in 1982 to 711,000 in 1995.

The proportion of women in management and supervisory ranks will continue to expand as women join the labor force and commit themselves to careers in food service. In 1980, women accounted for 35 percent of the managers in commercial eating and drinking places, up from 29 percent in 1970. Women constituted 57 percent of the supervisors in all of food service in 1980, up from 49 percent in 1970. The proportion of women in the overall foodservice workforce, however, fell from 69 percent in 1970 to 66 percent in 1980. Part of this decline is due to the higher educational attainment by women which has led to new opportunities in other fields.

The foodservice industry hires a substantial number of young people. Almost half the foodservice workforce is under 25 (table 27), and more than half work less than 35 hours a week (table 28).

Seven out of 10 workers in the fast food industry are under 21 years old. The mean length of employment for most fast food employees is about 1-1/2 years, with one-fourth staying with their jobs over 2 years, and a similar proportion for 6 months or less. Two-thirds of fast food workers are part-time employees who work less than 35 hours a week.

Food service, which as noted will need an additional 2 million employees by 1995, faces potentially serious worker shortages. The fast food segment, which hires primarily teenage entry-level employees at minimum wages, is

Table 27--Proportion of foodservice employees by age and sex, 1980

Age group	Male	Female	Total
		Percent	
16 to 19 years	14	15	29
20 to 24 years	7	11	16
25 to 34 years	6	11	17
35 to 44 years	3	9	12
45 to 54 years	3	9	12
55 to 64 years	2	7	9
65 years and over	1	2	3
Total	36	64	100

Source: (9).

Table 28--Average number of hours worked per week, 1980

Hours worked	Foodservice employees	All industry employees
	Percent	
Under 15 hours	14	5
15 to 34 hours	42	15
35 to 40 hours	33	54
Over 40 hours	11	26

Source: (9).

especially vulnerable. The number of teenagers is declining as the U.S. workforce overall is becoming older, better educated, and more skilled. As the baby boom generation matures, the 35- to 54-year-old labor force will expand, while the 16- to 24-year-old labor force will decline in absolute numbers, down 14 percent between 1982 and 1995.

Labor shortages have already disrupted the industry in several U.S. cities. While a wage-and-benefits bidding war raged among short-staffed restaurants in the Boston area, one hamburger chain bused crew members from 65 miles away to its suburban restaurants (5). Fast food chains there offered starting pay of $5.50 to $5.75 an hour, 65-70 percent above the current Federal minimum wage of $3.35. In one chain paying premium wages, franchisees shared a shallow pool of cooks and other employees among their restaurants in the wake of mass defections of workers to higher-paying jobs in and around Boston. Overtime pay and management coverage of some positions were common. But a tight labor supply is not unique to Boston. Atlanta's fast feeders are also troubled by labor shortages despite average entry level pay of $5.50 an hour.

Industry Structure and Organization

The structure and organization of the foodservice industry have changed significantly in the past two decades. Multi-unit firms, fast food firms, and franchise firms have become more dominant. The following analysis of trends in firm size and type of food service focuses on eating places.

Increase in Multi-Unit Firms

Foodservice chains--firms with 11 or more outlets--are growing in number and importance (table 29). Single-unit firms (including those operating under a franchise and independently) still account for a greater number of outlets and a larger proportion of eating-place sales, but their share in both categories is declining rapidly. Single-unit firms accounted for 80 percent of sales in 1963, 66 percent in 1972, and an estimated 52 percent in 1982. Chains captured most of the market lost by single-unit firms, increasing their share from 11 percent in 1963 to an estimated 33 percent in 1982. Chains' sales would have been even larger if the sales by single-unit firms operating under a franchise were included with franchise chains. Such sales, however, are included in the single-unit group. Single-unit firms affiliated with but not owned by McDonald's, Burger King, or Wendy's, for example, are grouped with independent single-unit firms rather than with their chain affiliates. Single-unit franchise establishments typically operate more like outlets of chains than as independents; that is, they use trademarks, uniform identification symbols and storefronts, and standardized prices and products. These franchise-affiliated firms account for roughly one-fifth of single-unit sales.

Currently, chains' sales-per-establishment annual average of $679,000 is nearly triple that of single-unit firms, 24 percent above that for firms with 4 to 10 units, and only slightly higher than for firms with 2 to 3 units. Between 1977 and 1982, firms with 2 to 3 outlets experienced the greatest increase in average sales per establishment (up 97 percent), followed by single-unit firms (76 percent), chains (60 percent), and firms with 4 to 10 outlets (51 percent).

The rapid decline in the number of establishments with low sales volumes and the inclusion of franchise-affiliated firms have buoyed single-unit firms' sales per establishment.

The exceptional rate of increase in per-establishment sales of firms with two to three outlets may have been due to their ability to draw customers by projecting a unique restaurant personality, motif, or theme. Furthermore, these firms are small enough to directly control each outlet and adapt quickly to changing market conditions and consumer preferences. They are large enough, however, to gain some size advantage in purchasing and advertising.

Growth of Fast Food Sales

Fast food outlets are limited-menu eating places offering drive-through or carryout services, or counter purchases with seating or standup eating facilities. They currently account for about 45 percent of all eating places with payroll, up from 22 percent in 1963. Growth in fast food outlets has significantly outpaced that of other eating places and substantially exceeded population and income increases.

Table 29--Distribution of eating places by firm size and type of food service 1/

Firm size 2/ and type of foodservice	1963	1967	1972	1977	1982 3/
			Percent		
Foodservice establishments:					
Single unit	90.8	90.4	85.3	80.0	73.3
2 to 3 units	4.0	3.0	4.0	3.9	3.8
4 to 10 units	1.4	1.6	2.4	3.3	4.7
11 or more units	3.8	5.1	8.4	12.8	18.2
Fast food eating places	21.9	28.8	37.5	42.3	45.3
Others	78.1	71.2	62.5	57.7	54.7
Sales:					
Single unit	80.4	77.4	65.9	59.5	52.3
2 to 3 units	5.8	5.3	6.3	6.8	7.1
4 to 10 units	2.9	3.7	4.7	6.1	7.2
11 or more units	11.0	13.6	23.2	27.6	33.4
Fast food eating places	14.6	19.0	30.3	37.6	39.4
Others	85.4	81.0	69.7	62.4	60.6
			$1,000		
Sales per establishment:					
Single unit	55	68	93	146	257
2 to 3 units	91	142	189	340	669
4 to 10 units	127	185	238	364	549
11 or more units	180	214	332	425	679
Fast food eating places	49	63	114	204	314
Others	81	108	156	247	399

1/ Eating places (SIC 5812 with payroll) are retail establishments that derive most of their revenue from sales of prepared meals and snacks for on-premise or immediate consumption. Eating facilities that are subordinate parts of other businesses (for example, a hotel restaurant or bowling alley snack bar) are excluded unless they are leased to and run by outside operators.

2/ Firm size prior to 1972 was based on the number of outlets operated by the same firm in the same general kinds of business rather than the same business, as in 1972 and subsequent years.

3/ ERS estimates.

Sources: (10, 11, 12, 13).

Fast food sales in 1982 amounted to $37 billion, or 39 percent of eating place-with-payroll sales. Sales at fast food places have increased at an average annual rate of 16 percent since the mid-1960's, compared with 10 percent for all eating places.

Many fast food outlets are small operations. Their sales-per-establishment thus averages only four-fifths that for all other eating places, $314,000 compared with $399,000. Sales per fast food outlet nonetheless increased faster than sales per other eating places between 1963 and 1977--10.3 percent versus 8.8 percent per year.

Since 1977, however, fast food outlets have not fared as well, with sales per establishment rising an average 9.0 percent compared with 10.1 percent for other eating places. This disparity belies the strength of the fast food sector whose total sales have outpaced those of other eating places since 1977. The closing of many diners with low sales volumes and the construction of fewer but larger restaurants have boosted the sales-per-establishment average for non-fast food eating places. The fast food segment, with a higher-than-average percentage of outlets built since 1977, was particularly hard pressed to establish customer bases and build sales at these new outlets during slow industry growth. Real (adjusted for inflation) annual sales growth at eating places averaged only 1.9 percent during 1977-82, compared with 4.2 percent during 1963-77. With more new outlets and the U.S. consumer's preference for convenience, the fast food industry is positioned to further increase its market share.

Franchising

Franchising has become a popular vehicle for foodservice growth, mushrooming from 40,000 establishments with $10 billion in sales in 1974 to 72,000 establishments with $43 billion in sales in 1984. Franchising enables the parent firm to expand its operation with a limited capital investment. Most franchise operations closely parallel large corporate chains with trademarks, uniform identification symbols and storefronts, and standardized products and prices.

Although franchises enable independent owners to enter the foodservice business with limited experience and expertise, a franchise requires a sizable investment. A franchise also restricts managerial discretion in procurement, menu offerings, and sales practices. The franchisee, who actually owns and operates the food outlet, agrees to maintain specific uniform products, services, and practices. Some franchisors are now reducing the availability of franchises by limiting or not licensing new ones and buying back from owners who do not meet performance standards or who wish to leave the business. Thirty-two percent of all franchise establishments were owned by the parent franchise firm in 1984, up from 25 percent in 1974.

Establishments owned by parent franchise firms outperformed those owned by franchisees, in terms of average sales, $665,000 versus $556,000 in 1984 and $330,000 versus $236,000 in 1974. Average sales increased 136 percent between those 2 years for franchisees, however, compared with 102 percent for company-owned establishments.

Two-fifths of franchise-affiliated fast-food outlets specialize in hamburgers. Burger outlets as a proportion of total franchise outlet sales fell during 1974-84 from 57 to 48 percent. Outlets specializing in chicken

dropped from 12 percent to 10 percent of total sales. Pizza outlets' share of sales increased from 7 to 12 percent. Sales shares held by Mexican food outlets and seafood outlets increased from about 2 percent to 4 percent each. Diversified menus are now blurring traditional definitions of one's competition. Burger outlets, for example, now offer various chicken and fish items; some chicken places offer fish.

Market Concentration

The Nation's 4, 8, 20, or 50 largest eating place firms have increased their share of eating place sales gradually over time. However, the 4 and 50 biggest eating place firms accounted for only 5 and 20 percent, respectively, of 1982 eating place sales (concentration data come from the Census of Retail Trade, conducted every 5 years). Among limited menu restaurants, the 4 and 50 largest firms accounted for 9 and 26 percent, respectively, of 1982 sales. These percentages would have been higher if the sales of single-unit firms operating under a franchise had been grouped with the sales of the parent franchise firm.

Such national aggregate data on concentration masks an important aspect of market power. The relevant focus for the individual firm--its local market power--may be lost during aggregate national analyses. Unfortunately, very little data are available on potential market power in local or regional markets.

Mergers and Acquisitions

Despite year-to-year fluctuations, the overall pace of food industry mergers and acquisitions increased during the 1980's. The average number of transactions per year was 607 for 1980-84, compared with 474 for 1975-79. Mergers and acquisitions involving foodservice operating firms totaled a record 49 in 1984, up from 43 in 1983 and 35 in 1982.

Most mergers and acquisitions involving foodservice operating firms during the 1980's were made to attain certain goals: controlling distribution costs, enhancing productivity, and strengthening positions in known business areas. Fewer ventures were made into an unrelated business (unlike diversification moves of prior years), while redeployment of assets and consolidations of areas of corporate strength took priority.

Examples of recent transactions between companies within the foodservice industry are the merger of Chart House and Godfather's Pizza into Diversifoods and the acquisitions of Ron's Crispy Fried Chicken by Church's Fried Chicken and of Gino's by Marriott. Each transaction helped solidify strength in a certain specialty. Examples of diversification moves typical of the 1960's and 1970's were the acquisitions of Burger King by Pillsbury, Pizza Hut by PepsiCo, Foodmaker (Jack-in-the-Box) by Ralston-Purina, York Steak House by General Mills, and Arby's by Royal Crown Cola.

No mergers or acquisitions involving foodservice firms have ever been halted for antitrust considerations. Several large acquisitions in recent years have raised questions regarding market shares and tendencies toward substantial market power, however. In 1968, the Antitrust Division of the Department of Justice set forth merger guidelines which outlined the general principles and specific standards used in screening potential mergers and acquisitions. These guidelines were updated in 1982. The main purpose of the Justice Department's merger enforcement is to prevent mergers and

acquisitions which make the exercise of market power or the ability of one or more firms to raise prices above a competitive level easier.

Whether future foodservice mergers and acquisitions are deemed anticompetitive enough to warrant challenge by the Justice Department depends on how such mergers and acquisitions compare with established guidelines. Any challenge would be difficult to mount, however, due to the competitive nature of food service, difficulty in defining relevant markets, and lack of available statistics to accurately measure market structure.

International Markets

"Foreign markets continue to be the 'new frontier' as franchisors capitalize on lucrative opportunities in the international marketplace," one industry source has commented. To be sure, overseas expansion by U.S. firms can be very lucrative and challenging. Local customs, language differences, building codes and regulations, and even religion must be taken into account. Finding suitable and dependable food and equipment suppliers poses another hurdle in overseas expansion. Daily variations in foreign exchange rates also make estimates of costs and returns difficult.

Some 5,500 foodservice establishments operated under a U.S. franchise in foreign countries in 1983, up from 1,622 in 1972. Canada was the largest market for foodservice franchise outlets with 1,539, followed by Japan with 1,334, Australia with 552, and the United Kingdom with 542.

As many foreign countries improve living standards and evolve into more service-oriented economies, receptiveness to American-style franchises should create export opportunities despite increased competition from local foodservice companies and other international firms. Foreign investment is a two-way street, however. Interest in gaining a toehold in the lucrative U.S. foodservice market has intensified among foreign investors. The first significant foreign investment in the U.S. foodservice industry was made by the Japanese in 1964 with Benihana's of Tokyo. By 1975, 11 foreign-owned firms were operating in the United States; by the end of 1980, the number had grown to over 40 firms operating about 3,800 outlets.

Foreign-owned U.S. eating and drinking places were dominated by six countries in 1980. Ranked in order of importance based on 1980 sales, the leading foreign investors were the United Kingdom, West Germany, Switzerland, Canada, Japan, and France.

Some seemingly unlikely sources of foreign investment have moved onto the U.S. foodservice scene. Hungary, India, and Pakistan each have at least one foodservice operation in the United States. The People's Republic of China (PRC) opened a 300-seat restaurant in Washington, D.C. in late 1982. It was the first of several such ventures launched jointly by the PRC and a group of Chinese-American investors who plan to have several such Szechuan restaurants operating in 1986.

Performance Measures

The BLS index of productivity (sales per hour worked) for eating and drinking places (SIC 58) declined from 100.0 in 1977 to 96.1 in 1982, then rose to 98.4 in 1983--a 2.4-percent rise in productivity over 1982. Indexes of change in number of employees and in hours worked increased 24 percent and 15 percent, respectively, during 1977-83. Sales did not increase fast

enough to offset the increase in total hours worked over this period. This drop in productivity is perplexing in view of the proportionate increase in chain outlets and franchise establishments which presumably benefit from economies of scale in advertising and promotion, centralized purchasing, inventory, accounting, technological innovations, and training programs.

Potential reasons for the productivity downturn in eating and drinking places after 1977 include 1) a 5-percent decline in real sales for drinking places, 2) energy price shocks and gas shortages that pressured menu prices and influenced consumers to stay home, and 3) longer business hours (at both ends of the day) to accommodate new breakfast programs and new products, such as salad bars and baked potatoes, that lure evening patrons.

For eating and drinking places, after-tax net income as a percentage of sales (one measure of profit) was relatively stable during 1975-79 at about 4 percent, then dropped to about 3 percent during the recession years 1980-82. Net income returned to 4 percent for eating places that sold alcoholic beverages in 1983, and more than doubled to 8 percent for eating places that did not sell alcohol (1, 2, 3). The range of profits in the foodservice industry runs the gamut from those outlets operating at a loss to some earning well over 10-percent profit.

Outlook

The price rise for food away from home in 1985 was 4.0 percent, compared with 4.2 percent in 1984. Price moderation reflects abundant supplies of most foods and eased inflation in the general economy, helping to hold down labor and other food marketing costs.

While an increase in the minimum wage would likely raise consumer prices for meals and snacks away from home, there was no pending Federal legislation as of January 1986 to raise the 1981 foodservice minimum--$3.35 per hour with a 40-percent tip credit. Individual States, however, may change minimum wage laws independent of the Federal Government. Five States and the District of Columbia have already enacted higher minimums (4). A study conducted by the National Restaurant Association found that a 4-percent increase in the minimum wage would generate a 1-percent increase in the cost of food away from home (15). A 10-percent increase in the minimum wage would reduce foodservice employment by nearly 4-1/2 million man hours, according to the study.

Consumer income is extremely important to the growth of the foodservice industry, especially the commercial sector. Data from USDA's Nationwide Food Consumption Survey of 1977-78 show the tremendous potential for growth in foodservice sales as per capita income increases. Average household expenditures for meals and snacks away from home for the highest income quintile was 227 percent more than that for the middle group and 832 percent more than average expenditures for the lowest income group.

BLS figures on weekly per person food-away-from-home expenditures further demonstrate the impact of income on spending for food service (table 30). Households with incomes of $30,000 a year or higher, for example, spent an average of 53 percent more per person per week on food away from home than did the average U.S. household. Household size, type of household, and geographic region also influenced per person eating-out expenditures.

Table 30--Weekly per person food-away-from-home expenditures

Selected household groups	Households purchasing food away from home in a week	Per person expenditures of selected household groups as a percentage of per person expenditures of the average U.S. urban household 1/
	Percent	
Average U.S. urban household	74	100
Income class:		
Under $5,000	58	64
$5,000 to $9,999	66	58
$10,000 to $14,999	81	86
$15,000 to $19,999	84	105
$20,000 to $29,999	88	108
$30,000 and over	91	153
Household size:		
One	63	189
Two	71	129
Three	79	98
Four	80	79
Five	82	65
Six or more	76	47
Household type:		
Married couple:		
Couple only	71	134
With children:		
Oldest child under 6	79	74
Oldest child 7 to 17	85	83
Oldest child over 17	81	95
Single parent:		
Male with child under 18	79	151
Female with child under 18	69	58
Single	63	189
Region:		
Northeast	71	102
Midwest	79	92
South	74	107
West	73	116

1/ Example: The average urban household with an annual income under $5,000 spent, on a per person basis, only 64 percent of what the average U.S. urban household spent; the average household with income of $30,000 or more spent 53 percent more than did the average U.S. urban household.

Source: (14); urban population = all persons living in Standard Metropolitan Statistical Areas (SMSA's) and in urbanized areas and urban places of 2,500 or more persons outside of SMSA's.

Low growth (as in 1979 and 1981) and even negative growth (as in 1980 and 1982) in inflation-adjusted per capita disposable personal income trampled real foodservice sales which grew only 1.6 percent during 1980-82. In comparison, significant increases in real per capita DPI of 2.5 percent in 1983 and 5.8 percent in 1984 pushed real foodservice sales in the commercial sector up 12 percent in that 2-year period. Less significant growth in 1985 was due to a modest rise of 1.3 percent in real per capita income.

Battle for the Food Dollar

Separate eating place sales rose 7 percent in 1983, after adjusting for inflation. This growth rate was matched or surpassed in only 3 of the past 25 years. Real sales rose 7.5 percent in 1963, 9.7 percent in 1964, and 7.1 percent in 1967. Eating places continue to outperform grocery stores whose sales, after adjusting for inflation, rose 3 percent in 1983.

As consumer spending for food away from home grows, particularly in fast food outlets, so does the competition. Convenience stores, traditional restaurants, and even supermarkets vie for a share of the takeout prepared foods market. Food marketers are also experimenting with new formats, merchandising strategies, and improved food products and services to satisfy an older, better educated, more diverse, and demanding population.

The fast food industry has moved in several new directions to build its market share. It is operating outlets in new locations, such as schools and college campuses, hospitals, military bases, toll roads, bus terminals, retail stores, shopping malls, center city office buildings, recreational sites, and international markets. Menus now include such items as salad bars, salad entrees, pasta dishes, baked potatoes, gourmet burgers, more fish and chicken items, soups, fruit juices, and whole grain buns. Many foods have been added in response to demand from health- and diet-conscious individuals. This market segment has expanded as the scientific base linking diet and health mounts and as women, who are joining the labor force in large numbers, eat out more often. Many fast food outlets have upgraded their decor and added driveup windows to attract more business. These outlets have also introduced breakfast and dinner specialties, extended operating hours, and established a niche in the catering business to get full use of equipment and to increase unit sales.

Many full-service restaurants are experimenting with lighter dishes and emphasizing freshness, quality, regional cooking, and seasonality to increase customer traffic. Compared with fast food places, these restaurants enjoy greater flexibility to adapt menus and preparation methods quickly to meet changing consumer preferences. Some full-service establishments are launching gourmet takeout foods to boost unit sales and expand the customer base.

Changes in the variety of foods eaten, the time spent in preparing meals, and the amount of service bought depend on available alternatives and income. The fast food industry has developed because the necessary technology was available and because our highly mobile society, with a large number of working adults, could afford such a service.

Projections from the U.S. Census suggest that significant changes favoring continued increases in eating out will likely occur by 1990. The percentage of the total population between 25 and 44 years old, for example, should increase 4 to 5 percentage points during 1980-90. People in this category

eat out more often than other age groups. One-person households should rise from 23 percent of the total population in 1980 to 25 percent by 1990. On a per capita basis, these households spend 89 percent more than the average household for food away from home, while two-person households spend 29 percent more than average (6). One- and two-person households should constitute 57 percent of all households by 1990, up from 54 percent in 1980.

Further increases in the proportion of women in the labor force should also enhance the prospects of the food away-from-home industry and influence the marketing of many food products and services. The percentage of women 16 years or older in the labor force was 53 percent in 1984, up from 43 percent in 1970 and 34 percent in 1960. Nearly 7 in 10 women age 20 to 44 years are now in the labor force, compared with 6 in 10 women age 45 to 54 years, and 4 in 10 women age 55 to 64 years. If most of the current female labor force participants age 20 to 44 years remain in the labor force and if succeeding generations of women participate at an equal or higher rate, the overall rate of participation by women will increase into the first decade of the next century.

The proportion of the total U.S. population in the Northeast and Midwest regions should fall from 47.7 percent in 1980 to 43.6 percent in 1990 and 39.6 percent by 2000. This means almost 6 of every 10 Americans could be living in the South and West by the end of this century. About one in four Americans will live in one of the three growth States--California, Texas, or Florida. These projected regional shifts mean greater opportunities for foodservice growth in the South and West, and could also influence national food purchase and consumption patterns. Cajun-type fried chicken, southern biscuits, oriental stir-fry dishes, and Mexican specialties including nachos, tacos, and salsa, for example, are already popular in every major region. Meanwhile, opportunities for expansion should continue in the Northeast and Midwest since population density will remain relatively high despite slower growth (or even moderate declines) in population there.

Increases in consumer income, after adjustment for inflation, should spawn additional foodservice growth. Studies have found that a 10-percent increase in consumer income results in a 5.5- to 11.6-percent rise in sales of meals and snacks away from home, assuming other factors remain constant (7). The midpoint of this range of estimates was chosen to estimate the impact of changes in income during the next decade; that is, a 10-percent rise in income would result in an 8.5-percent rise in per capita meal and snack expenditures. Assuming that inflation-adjusted per capita income rises to $5,817 by 1994 and that population totals 260 million, inflation-adjusted sales of commercial eating places shall rise 25 percent during 1984-94 for a compound annual increase averaging 2.3 percent, compared with an average increase of 3.0 percent during 1977-84. Changes in the age and geographic distribution of the population, household size, consumer preferences, and improved marketing and merchandising efforts could further enhance growth.

Continuing efforts to contain the Federal budget will restrain foodservice sales in the noncommercial sector. This might create lucrative market niches for commercial firms capable of providing efficient, cost-saving foodservice alternatives to such institutions as hospitals and schools which traditionally run inhouse feeding operations.

Fast food franchise firms will probably continue increasing their market share, primarily taking sales from single-unit firms and traditional, unaffiliated full-service restaurants and diners. Industry strategy in the face of slower growth will probably include price cutting, bigger advertising budgets, innovative menus, remodeling of interiors, and more mergers and acquisitions. As the competition for the consumer's dollar intensifies, head-to-head advertising will likely increase.

The eating place sector faces further competition from other areas of food retailing. The microwave oven will figure prominently in this competition. Grocers, stepping up the battle for market shares, are experimenting with onsite bakeries, delicatessens, salad and juice bars, bulk foods, natural food centers, and expanded sections of upscale frozen-prepared foods ready for heating in a microwave oven. Convenience stores, with increasingly heavy investment in microwave ovens and other foodservice equipment, are also rapidly expanding their share of foodservice sales. Forty-two percent of U.S. households had microwave ovens in 1985, according to a Gallup poll, up from 13 percent in 1980. Campbell Soup Company estimates that microwave ovens will be in 70 to 80 percent of all homes by the year 2000 (8).

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